Burnout, Work Engagement, and Resilience among

Malaysian

University Academics

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**Abstract**

The main purpose of this study is to investigate the relationship between burnout, work engagement, and resilience among Malaysian university academics. A mixed-methods approach was used for this study, in which a total of 681 university academics, included to represent various academic levels, completed a web-based questionnaire. In-depth interviews were also conducted (*n* = 12) at three-time points through the course of one semester to gain an understanding of participants’ burnout trajectories and to identify any changes to burnout levels during the academic year. All the interview data were analysed thematically. For the quantitative analysis descriptive statistics, correlation coefficients, hierarchical multiple regression, multivariate analysis of variance (MANOVA), and structural equation modelling were conducted with SPSS and Mplus. A confirmatory factor analysis (CFA) was conducted to evaluate the measurement model for resilience and burnout-engagement in university academics.

A key finding was a significant negative relationship between burnout and resilience, with higher levels of resilience associated with low burnout. There was also a negative relationship between burnout and engagement. Interview data showed that the majority of academics found their job stressful and blamed institutional factors such as a lack of resources, funding cuts, impossible workloads, and rising expectations from management for their burnout episodes. Findings also showed that early career academics suffered the most burnout. This study concludes with a section of potential implications of the findings and the necessary recommendations for future research.

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**Declaration**

I declare that this thesis is a presentation of original work and I am the sole author. This work has not previously been presented for an award at this, or any other, university. All sources are acknowledged as References.

**Chapter One: Introduction**

## 1.1 Background of the Study

Burnout is described as a syndrome that comprises of three major elements, long-term exhaustion, depersonalisation, and lack of personal achievement and is a reaction to prolonged stress in occupations where it involves working with other individuals and interacting with them (Maslach, & Jackson, 1981). Previous research has suggested that academics in higher learning institutions are facing burnout each day as a result of the acceleration of demands and constantly changing conditions in spheres such as social, economic, and political life (Court & Kiman, 2008; Henny, Anita, Hayati, & Rampal, 2014; Panatik et al., 2012). Other identified pressures faced within the job leading to burnout include emotional distress, pressure to succeed, role ambiguity, and stress from promotions (Court & Kiman, 2008; Gmelch, Wilke, & Lovrich, 1986; Vesty, Sridharan, Northcott, & Dellaportas, 2015). This excessive strain faced by individuals not only predisposes them negatively, but also boosts the occurrences of burnout. Generally, the role of an educator is indeed stressful, whether within a school or university setting. In the case of school teachers, findings across different countries, indicate that being in the profession has accumulated the utmost and severe levels of stress and burnout (Cano-Garcia, Padilla-Munoz, & Carrasco-Ortiz, 2005; Jamal, 1999). As a result of this, leaving the career for the majority of teachers occurs exceptionally early as a result of experiencing burnout on the job (Cano-Garcia et al., 2005; Hakanen, Bakker, & Schaufeli, 2006; Tang, Au, Schwarzer, & Schmitz, 2001).

Accordingly, research and practice within the international scope present a persistent effort to comprehend and prevent burnout among teachers and academics (Henny et al., 2014; Mojsa-Kaja, Golonka, & Marek, 2015; Vandenberghe & Huberman, 1999). Understanding what motivates academics to strive for excellence remains a critical issue in education today because most academics agree that there are numerous factors that may influence their performance. Recently, global trends in universities have shown a rise in occupational stress among university academics, which in excess amounts has led to this burnout scenario (Henny et al., 2014; Winefield et al., 2003). Universities are no longer recognised as being the low-stress working environment they once were; academics are now encountering and bombarded with a considerable amount of strain which before this was not readily observed (Gmelch, Lovrich, & Wilke, 1984; Noordin, Wan Shukran, Abdul Hamid, & Hamali, 2013). Over the last three decades, investigations have enlightened how job demands contribute to and impact the well-being of those working within the higher education sector (Abouserie 1996; Gillespie, Walsh, Winefield, Dua, & Stough, 2001; Gmelch et al., 1986). International attention towards burnout among teachers has thus been growing owing to concerns over the reduced health of staff and the quality of teaching (Gmelch et al., 1986; Howard & Johnson, 2004; Lo, 2014).

Burnout research conducted over the years in numerous countries, for instance Australia, Canada, the United States, the United Kingdom and China, has shown that occupational burnout is now more prevalent in higher education than it was ever before (Court & Kinman, 2008; Kinman, Jones, & Kinman, 2006, Kinman, 2001; Tytherleigh, Webb, Cooper, & Ricketts, 2005; Zhang, 2007). Aspects of work considered to be especially demanding leading to burnout among academics are excessive workload and work-life imbalance (Tytherleigh et al., 2005), lack of respect and esteem, inadequate or no opportunity for advancement, unnecessary administrative duties, insufficient support with regard to administrative responsibilities, and ineffective communication (Edwards, Van Laar & Easton, 2009; Kinman & Wray, 2013).

Age has been suggested as another key factor contributing to occupational stress leading to burnout, as reported by numerous surveys conducted in Australia and the UK (Winefield et al. 2003; Tytherleigh et al. 2005). In a study done by Watts and Robertson (2011) full-time university academics across 12 countries who are categorized within the younger cohort were seen to be more vulnerable and had a higher likelihood of suffering from burnout in comparison with their older counterparts. Aspects such as high numbers of students, higher contact hours and interaction with those they teach, pressure to publish and attain research funding as well as excessive workload were seen as major contributory aspects leading to academic strain and burnout, respectively (Winefield et al. 2003; Court & Kiman 2008).

By looking at this scenario, excessive exposure to stressful situations leads one toward burnout. Farber (1998) notes that burnout has an especially high likelihood of occurring in individuals who are involved in jobs requiring constant contact with other individuals, in this case, academics with their students, peers, and administrative staff. Burnout may also obstruct academics from flourishing in their everyday duties due to it affecting the quality of service given by that particular person (Watts & Robertson, 2011). In the case of university academics, not only are they expected to impart knowledge to students and engage in research activities, they also take on a heavy administrative workload. To make matters worse, the working environment under the influence of other factors such as oversized classes, inappropriate educational training, unfriendly political atmosphere, and seeing no opportunities for promotion in their profession will further lead academics to feel powerless and frustrated, hence the formation of burnout (Asimeng-Boahene, 2003; Farber, 1998; Pines, 2002).

Taris, Schreurs, and Van Iersel-van Silfhout (2001), on the other hand, state contrary to what others believe teaching is not the primary cause of most academics’ stress, although it is often seen as the chief responsibility of university academics. However, they suggest the core sources of anxiety are in fact due to academic research, performance evaluation, and giving back to the community. As one’s performance in this particular career depends much on the quality and quantity of research and articles produced, additional stress may be encountered because of time restrictions in producing such products (Vesty et al., 2015). In the United States, teaching-related stress is perceived to be higher than stress related to research and contributions (Gmelch et al., 1984). However, this result may differ from one culture to the other (Gmelch et al., 1984). Teaching load is also seen as another major work stressor that contributes to burnout (Vesty et al. 2015). Academics who have a less demanding workload and who are within an institution which supports lower teaching loads, releasing time for research or other service activities, are less likely to suffer from burnout (Minter, 2009). Minter (2009) also notes that receiving a number of publisher rejection slips over a period of time and personal relationship issues not necessarily related to one’s work are contributing factors of burnout. The quantity and severity of stressors academics experience over time may easily entrap them into the “burnout cycle”. Those caught-up in this cycle will eventually exhibit dysfunctional professional behaviours, leading to marginal performance in one or more of the responsibility areas of teaching, service, research, pastoral student support, and even in interpersonal relationships with their colleagues and family members (Minter, 2009).

Minter (2009) further describes the higher education setting as a “breeding ground for burnout” (p. 2) for several reasons: one, being that information with regard to work-related stress and burnout is not easily accessible, and two, unlike most professions where those who underperform are quickly penalized, academics who underachieve in higher education are often accepted and overlooked altogether. In some cases, the tenure system guarantees and safeguards such individuals, which not only exerts a bad influence on their colleagues but also causes those around them additional pressure (Minter, 2009).

Research shows that holding multiple roles such as mentor, researcher, and leader may lead academics to feel distressed and exhausted, so too may the increasing perception of environmental and extrinsic stress (Taylor, Zimmer, & Womack, 2005). Besides examining situational factors e.g. job resources and job demands (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001), studies have also scrutinized characteristics of individuals that could contribute to the disparities of burnout levels in academics (Brouwers & Tomic, 2000; Cano-Garcia et al., 2005). A common exhaustion-provoking situation that relates to personal characteristics would be when academics have uncertainties about their ability to teach. Academics with a high sense of confidence and self-assurance are prone to adapt better in educational settings, and thus are more adjusted in the workplace negatively correlates with burnout (Evers, Tomic, & Brouwers, 2004). This is where resiliency traits are vital. In contrast, academics lacking such confidence are not able to achieve pleasure from work, by this means prompting work stress which may slowly lead to burnout (Evers, Gerrichhauzan, & Tomic, 2000).

According to Taylor et al. (2005), it is imperative to recognise that burnout, when in severe form, may result in academics abandoning their teaching career altogether due to being incapable of handling the strain (Taylor et al., 2005). Nevertheless, up until now, burnout has been given considerably lesser attention compared to stress and its consequences (Kyriacou, 2001). This is perhaps due to the dominance of stress models around and the complexities of defining and appropriately measuring workplace burnout (Guglielmi & Tatrow, 1998). Nonetheless, the capacity of burnout to harm one’s profieciency and well-being demonstrated in other public service settings signifies that it ought to be explored further (Maslach & Jackson, 1981; Guglielmi & Tatrow, 1998). Some researchers contends that even though investigation of burnout is evolving, the literature has so far been dominated by descriptive reports; and less of the extent of the phenomenon (Schaufeli & Buunk, 2003). Consequently, a more thorough examination to produce better understanding of the nature and workings of burnout among academics in higher education, and suggestions for the well-being of academic staff in the nearby future is thus needed, which this study will address.

The increasing rate of university academics quitting their careers across the globe, is one of the dilemmas university management are facing (Ologunde, Asaolu & Elumilade, 2012). Evidence shows that academics quit their jobs due to the extreme burnout faced at the workplace, in addition to other unsatisfactory situations (Ologunde, Asaolu & Elumilade, 2012). In Malaysia, the ministry of education is also encountering similar problems with retaining valuable academic staff particularly within universities in the private sector. Mirroring results found from earlier studies, this is owing to similar factors; that is, work pressure and other job-related problems such as commitment towards the organisation (Henny et al., 2014; Idris, 2009; Noordin, Othman, Mohd Jais, & Sardi, 2012; Panatik et al., 2012).

Recently, researchers have started to include years of experience and career stages when examining the emergence of burnout. Although numerous studies have been done in regards to what causes burnout, the literature review finds only a few have closely examined the influences of career stages or years of experience on burnout among professionals. Career stage is of relevance to be explored within this burnout continuum as according to the theory of careers as described by Super (in Innanen, Tolvanen, & Salmela-Aro, 2014) individuals tend to accomplish momentous developmental tasks as part of their career decision-making process and hence, burnout may be present and dominant within a particular career stage. According to Havighurst’s (1980) traditional theory of developmental tasks, he proposed that in order for one to cope in the next life stages, an individual needs to first endure and survive with certain tasks of a given life stage. Here, career stages have been identified as being comprised of four phases which are: Establishment (ages 21-26 years, early career), Advancement (ages 26-40 years, middle career), Maintenance (ages 40-60 years, late career) and lastly Withdrawal (ages 60 years and more, departure) (Cummings & Worley, 2001 as cited in Organization Development, n.d.). These age brackets do not necessarily fit comfortably onto these stages, and in society there does not exist a unified agreement on the definition of “career stage”. Hence, careers stages can also be identified by the number of years in service or of experience (organisational tenure). In this aspect, practice of 10 years or less is regarded as early career, 11 to 20 years as middle career, and 21 or more years as late career (United States Office of Personnel Management, 2006). During the early career stage, junior educated employees may be involved in many developmental tasks, for instance adaptation to the organisation, learning the job, and pursuing their career goals. At the same time, they too have other personal tasks in their day-to-day life, including being a parent, spouse, and so on (Super as cited in Innanen, Tolvanen, & Salmela-Aro, 2014). Having many simultaneous tasks at this stage of one’s career endangers young workers to be subjected to burnout (Innanen et al., 2014). In a study of 522 police officers, Burke (1989) found that those who were between the sixth to fifteenth year in their career experienced the highest levels of perceived burnout. Those officers who have less than five years and more than sixteen years have perceived burnout levels that are significantly lower than the officers in the "midcareer stage".

In Malaysian universities, a study conducted by Chen et al. (2014) indicated that those with reported burnout characteristics were mostly junior academics such as associate lecturer, lecturer, or senior lecturer. This observation coincides with prior findings (Jackson, Barnett, Stajich, & Murphy, 1993; Hind, Dornbusch & Scott, 1974; Watts & Robertson, 2011). Malaysian academics, specifically within the 21 to 40 years of age group were found to experience more burnout in contrast to the other age groups (Chen et al., 2014). This is potentially due to younger academics being involved in teaching undergraduate classes, hence the larger number of students, as opposed to graduate teaching (Hind et al., 1974; Kokkinos, 2007). Another possible reason could be that younger academics tend to sruggle for international recognition as well as academic rank as opposed to their senior counterparts (Blix, Cruise, Mitchell, & Blix, 2006). Therefore, younger academics, or those within the establishment stage of their career and who lack experience, tend to have higher expectations and compete more and are therefore more prone to burnout (Kokkinos, 2007). It is therefore necessary for universities to recognize burnout and the aspects that lead to its occurrences due to the damaging effects it brings, not only to faculty members, but also to the institutions.

## 1.2 Statement of Problem

Generally, academics are predisposed to burnout, possibly as a result of the close and persistent interaction with students as well as having to maintain relationships with a large number of people i.e. students, colleagues, and administrators (Karabiyik, Eker, & Anbar, 2008). Academia, while hectic and portrayed as being a very challenging work environment, if executed well may support academic success, however, in contrast it may also strain one’s mental health, especially those who strive for high standards of performance. University academics are deemed to provide adequate support to their students, inspire and encourage them to continuously learn. With all these expectations and roles being placed on their shoulders, it is not surprising that their levels of stress and burnout are steadily increasing (Salami, 2011).

In the UK, academics are expected to provide students needed attention and continuous informal support (Merril, 2001; Quinsee & Hurst 2005). What is more, with the increase in student numbers in higher learning institutions, the occurrence of burnout among educators could be intensified (Marland, 2003). Other research points to the lack of interest from students and low social engagement playing a significant role in developing teacher burnout (Friedman, 1995). Moreover, students displaying a lack of readiness in class also adds extra load to their already hefty teaching schedules and substantial research obligations (van Horn, Schaufeli, & Enzmann, 1999).

Despite the fact that academics are prone to experiencing burnout, there is no denying that many academics seem to be very much engrossed and motivated in their careers (Klusmann, Kunter, Trautwein, Ludtke, & Baumert, 2008a). Work engagement is known to be the conceptual opposite of the burnout variable and has also likewise attracted increased research attention (Hallberg & Schaufeli, 2006). Work engagement is defined as an energetic state in which an individual is dedicated to render outstanding work performance and at the same time is confident in his or her effectiveness (Schutte, Toppinen, Kalimo, & Schaufeli, 2000). Hence, whilst not all academics may be burned out by their profession, addressing those academics who are engaged in their career is also equally important, and is something this present study investigates. Within the academic setting, past studies have revealed that academics with higher levels of work engagement have a decreased burnout risk compared with those with lower degrees of engagement (Barkhuizen, Rothmann, & van de Vijver, 2014). However, the mechanisms accounting for this association have yet to be fully examined in depth when it comes to the higher education setting and many burnout studies related to educators have tended to focus more towards teachers and are lacking when it comes to academics within university settings (see Dorman, 2003 & Friedman, 2000) for example).

In producing Malaysian graduates of the utmost quality, the well-being of university academic faculty is therefore vital. (Morris, Yaacob, & Wood, 2004). Burned out and less engaged faculty are an issue for many universities in Malaysia as the academician’s work scope has recently become extremely excruciating (Idris, 2009; Noordin, et al., 2012., 2013; Winefield et al., 2003; Zahra, Irum, Mir, & Chishti, 2013). Clearly, looking at the present scenario triggering the university setting, resilience is probably an important human capacity for academics as they confront and overcome the stresses of lecturing while also juggling a heavy workload. Being resilient is the capacity to see things realistically and to recognize what is possible or otherwise. Whereas it is argued that burnout is one major factor that diminishes an academic’s performance and that developing resilience skills may buffer this process (Toker, 2011). When things are going in the wrong direction, working towards a resilient state is the best response. Resilient adults are able to maintain positive relationships, solve problems skilfully and derive some sense of meaning from challenges (Ee & Chang, 2010). Resilient teachers are considered problem solvers and change agents in such a way that upon having total authority over their work their levels of stress simultaneously decrease (Patterson, Collins, & Abbott, 2004). Resilient individuals, are those individuals possessing a unique array of attributes that aids in them to approach challenging conditions that somehow adds to their resilient nature (Akgemci, Demirsel, & Kara, 2013). One exceptional attribute that sets resilient individuals with those non-resilient individuals apart is learning from the experiences of life obstacles and to utilise that knowledge in a way to cope and withstand better for the future (Tugade & Fredrickson, 2004)

In agreement with many researchers, resilience could be the missing element that may aid workers in overcoming this burnout dilemma (Dunn, 2003; Wagnild & Young, 1993; Zunz, 1998; Kaufmann, 2001). Presently, ignorance of the importance of resilience and the ambiguity surrounding the concept make the problem of burnout severe. Burnout is seen as an issue of the social environment rather than a problem related to a particular individual, whereby the influence of one’s internal and external environment contributes to the development of burnout (Ahsan, Abdullah, Fie, & Alan, 2009; Maslach & Leiter, 2005). In times when there is little hardship and when harsh conditions are non-present, the need to study human resilience is of course not crucial. However, during times when the higher education setting is demanding and filled with adversity, the necessity to examine it becomes substantial. Subsequently, it is essential that by developing resilience, academics may overcome the strains and ambiguity they face during their career. Due to this it is important that the relationship between burnout, work engagement, and resilience among academics be identified.

## 1.3 Objectives of Study

The main objectives of this study are four-fold:

1. To examine the relationship between work engagement, burnout, and resilience among university academics in Malaysia.
2. To investigate the levels of burnout and work engagement of the university academics across career stages and/or years of experience.
3. To examine the identified changes of burnout, engagement, and resilience across one semester among Malaysian university academics.
4. To explore what factors Malaysian academics identify as influencing their burnout, work engagement, and resilience levels.

**1.4 Significance of the Study**

The need for a more comprehensive exploration of academics’ burnout in the workplace ought to be looked into. Although there is in existence a valuable and ample body of international studies investigating burnout, however in much of a lesser magnitude within a Malaysian setting, these studies are often one-off in nature and primarily focusing on offering insights into individuals’ experience of burnout and interventions at that particular time. Currently, the apparent need of adding to the body of research to srcutinize the development of burnout over time is thus needed. Whilst burnout research in a longitudinal nature is in evidence, it is nevertheless inadequate and scarce (especially within the Malaysian context) and owing to this reason, insufficient knowledge is available in regards to how burnout progresses or changes (Van Dierendonck, Schaufeli, & Buunk, 2001). Hence, this study intends to contribute to the burnout literature in terms of the evolution of burnout amongst university academics over time.

This study endeavours to contribute to and shed more light on the field of burnout research by investigating the role and presence of psychological resilience on academics’ engagement and performance levels. This relationship is somewhat unexplored and the need to understand the coping strategies and psychological characteristics used by resilient employees is therefore essential (Mealer, Jones, & Moss, 2012). Furthermore, this research was designed to provide a fresh, new lens in addition to enhancing the body of knowledge relating to the burnout-engagement-resilience spectrum which has relevance to Malaysia, owing to much of the available burnout research originating from other parts of the world.

Academics were selected as the focus for the present study as academics in higher learning institutions are now being recognised as being under particular stress and are at present more persistently faced with substantial strain that was not previously experienced (Gmelch, Lovrich, & Wilke, 1984; Noordin, Wan Shukran, Abdul Hamid, & Hamali, 2013). As higher learning institutions are now being recognised as a high-stress work setting, investigations have begun to enlighten how job demands impact the well-being of those working within the higher education sector (Abouserie, 1996; Gillespie, Walsh, Winefield, Dua, & Stough, 2001; Gmelch et al., 1986).

## 1.5 Research Questions

The research questions for this study are as follows:

1. What is the relationship between work engagement, burnout, and resilience in university academics in Malaysia?
2. What is the extent to which Malaysian university academics differ in their burnout and work engagement levels across career stages and/or years of experience?
3. What are the identified changes of burnout, engagement, and resilience across one semester (14-week period) in Malaysian university academics?
4. What factors do Malaysian academics identify as influencing their burnout, engagement, and resilience levels?

## 1.6 Chapter Outline

This research is arranged into eight main chapters. This introductory chapter has outlined the background of the study, statement of problem, study objectives, significance of the study, and research questions. Chapter two then highlights Malaysia’s background and the context of the study, shedding light on the education system and deliberating the current education situation in Malaysia. In short, it offers some overall information on the Malaysia education system, related to the key issues addressed in this study and the rational on why Malaysia is the area of focus. A review of the relevant literature focusing on the related areas, including an outline of burnout, work engagement, and reslience, containing the relevant related studies is included in Chapter three. Chapter four highlights the procedures and methodological aspects of the study. A mixed-method research design is used for this research as well as a phenomenological paradigm. Next, in chapter five, the quantitative findings from the data are discussed and subsequently, in chapter six the qualitative results are presented in detail. For chapter seven, a thorough discussion of each of the research questions is thus given. In the last chapter, a summary of the entire thesis is presented. It also outlines the limitations of the study and recommendations in the context of Malaysia. The final chapter concludes with some practical suggestions for further research respectively.

**Chapter Two: Context of the Study**

**2.1 Introduction**

This chapter provides some background of Malaysia, beginning with a brief introduction of Malaysia and Malaysian higher education. This will be followed by an outline of the history of education in Malaysia, the education policy and practice and the current education situation. Finally, a look into Malaysia’s cultural dimension profile is presented based on Hofstede’s cultural dimension theory (2001), in addition to issues of Western dominance in psychology and Western bias in justifying the rationale for undertaking the study and the area of focus. The goal is to provide the reader with some general idea and background in regards to the current scenario occurring within the Malaysian education system, so to enable them to place such issues surrounding burnout into context.

**2.2 A Brief Introductory of Malaysia and Malaysian Higher Education**

Malaysia is popularly referred to as a multi-ethnic society (Embong, 2002) with the existence of diverse ethnic groups, including the Malays, Chinese, Indians, Ibans, Kadazans, and ethnic minorities such as the indigenous people or Orang Asli, who have played an important role in shaping Malaysian history. A long history of the development of the education system on the other hand, exists from the very onset of Malaysia’s establishment (Al-Hudawi, Fong, Musah, & Tahir, 2014). Malaysian authorities have had a long and tedious journey of building a comprehensible philosophy of education to cater to this multi-ethnic, religious, and culturally diverse society (Nooraini & Khairul, 2011). This was realised through the formation of the National Education Philosophy (NEP) with all educational processes at the national level being envisioned by the NEP (Al-Hudawi et al., 2014). The NEP, formed in 1988 according to the needs of Malaysian citizens was aimed at advancing its citizens to develop a more enhanced and progressive society (Ministry of Education, 2001). In the formation of the NEP, six factors were taken into attention, which are social factors, religion, economy, globalization, politics and individuality (Meng, 1996). In short, the NEP was adopted at the height of a long search for ‘a national system of education to serve as the foundation for integrating various ethnic groups, as well as the agent for socioeconomic development…’ (Rosnani, 2004, p. 113).

Over recent years, as part of the initiative taken by the Malaysian Ministry of Higher Education, Malaysian universities have been transitioning towards becoming world class Research Universities with the components of research and publishing considered a critical aspect and forefront for academics (Henny et al., 2014). Higher education in Malaysia began with the formation of University Malaya in 1959 and is framed through the various public and private institutions. At present, Malaysia is home to 20 public universities, 53 private universities, 33 polytechnics, 403 active private colleges, six foreign university branch campuses, 73 public community colleges, and 37 public community colleges (Grapragasem, Krishnan, & Mansor, 2014; Hamzah, Hamzah, Othman, & Devi, 2016; Ministry of Higher Education Malaysia, 2015). To date, several of these Malaysian institutions have been listed in at least one of the 30 disciplines of the Quacquarelli Symonds (QS) World University rankings being among the global top 200 (“UM breaks into Top 100 in World University Rankings,” 2018).

In Malaysia’s aspirations to become an international avenue in respect to higher education by the year 2020 (Ministry of Higher Education Malaysia, 2015), five of its 20 public universities have already been granted research university status. These research universities have the luxury of governing their institutions independently in managing academic matters, human resources, financial, student admissions and, administration (Hamzah, et al., 2016). This dramatic development and drastic changes in the number of colleges and universities has resulted in the setting up of even more public and private institutions of higher learning. As such, the Malaysian government have implemented countless alterations in the governance of these public and private universities besides setting-up the Malaysian Qualifications Agency (MQA). The government too have guaranteed that education of high quality is delivered to the students in these higher learning institutions (Grapragasem et al., 2014).

This Malaysian transformation plan in higher education, or the National Education Blueprint (NEB) launched in December 2012 was developed by The Ministry of Education (MOE). Through the MOE, the government restructured the higher education system to enable it to respond to the need for nation-building and also developed strategies and plans in ensuring that Malaysian Higher Education Institutes (HEIs) are undertaking change and achieving excellence to face competition posed by the global education market. This is to guarantee that Malaysian universities would attain world-class status and operate as a hub for higher education in the Southeast Asia region (Ministry of Higher Education, 2007). According to a report from the World Bank (2007, March 9), ensuring that Malaysian higher education converges with the principles of neoliberal globalization is a critical goal of neoliberal global institutions. The NEB desires to engage in the global competitive economic growth and due to this somehow uneven impact of globalization on the national education systems, it has thus left an impression on all universities in Malaysia (Nair-Venugopal, 2006) to the point of knowledge changing into the status of a commodity, which is the hallmark of the global neoliberal globalization as mentioned by Campbell (2012).

The doubt and anxiety surrounding this issue of renovation and globalization is manifesting itself in Malaysian institutions as individualistic philosophies and courses that are being pursued in the goal of turning Malaysia into a competitive nation (Goh, 2008). What is visible in the present-day is that Malaysian society is now bombarded with worldwide consumerism and increasing individualism and where they once sought after cultural values of care, empathy, and respect they are now gradually diminishing those and replaced them with these values of individualism (Campbell, 2012). Presently, in the context of Malaysia, strains from the demands for competitive enhancements, performance regulation, and the broad discourse of neoliberalism seem to be the present at the forefront of this pursuit for institutions (Campbell, 2012).

In the Browne Report (2010), students, as customer, are positioned at the core of higher education, affirming business interests are now being fully acknowledged. Since students are now considered more significant stakeholders than ever before, they are persistently being asked if they are satisfied customers and have the due rights to evaluate those who teach and interact with them i.e. their lecturers or university instructors (Cruickshank, 2016). Hence, the existence of instruments to be used in assessing faculty members and lecturers, such as the Student Feedback Survey and, for courses, course evaluations. According to Feldman and Sandoval (2018) within the new “industry”, students have now become very powerful customers who purchase a product from a service provider, signifying the “Metric power” nature of the current academic world (Feldman & Sandoval, 2018).

As a result of all this commotion, performance has now developed into an important indicator in Malaysian academe because of the growing competitive pressure and limited resources given by institutions, placing academics under new strain and pressure (Henny et al., 2014). The success of Malaysian universities in producing quality graduates depends primarily on the wellbeing of its faculty (Morris, Yaacob, & Wood, 2004). Exhausted, weary or burned out faculty are a concern for many universities in Malaysia owing to the recent excruciating work scope falling on these academics (Henny et al., 2014; Idris, 2009; Noordin, Othman, Mohd Jais, & Sardi, 2012; Noordin, Wan Shukran, Abdul Hamid & Hamali, 2013; Winefield et al., 2003; Zahra, Irum, Mir, & Chishti, 2013) and given the current scenario triggering the university setting, resilience is possibly one of the most essential capacities required of an academic as they encounter and overcome the stresses of lecturing as well as juggling heavy workloads, which can cater to those academics experiencing burnout phases.

With the increasing number of roles that are expected of these academics it is of no suprise that their levels of stress and burnout are gradually increasing by year (Salami, 2011). In addition, with the increase in student numbers in higher education besides the demands from these individuals, the occurrence of burnout could hence further intensify (Marland, 2003). For such reasons, a study is warranted to fill the gap of knowledge against the backdrop of the massive and rapid educational demands being placed on academics in both the public and private universities of Malaysia.

**2.3 Malaysia’s Cultural Dimension Profile**

This section provides some background on Malaysia’s cultural dimension profile with the help of Hofstede’s cultural dimension theory (2001). This will be followed by an exploration of the western dominance in psychology and its related biases.

**2.3.1 Hofstede’s cultural dimension theory**

Geert Hofstede’s (2001) cultural dimension theory explores the unique aspects of cultures and makes a comparison of these different cultures on particular scales. Hofstede’s original model was primarily a global survey conducted among a group of employees at IBM between the years 1967 and 1973. Hofstede’s theory was one of the initial theories to quantify the differences in culture.

**2.3.2 Hofstede’s cultural value dimensions (2001, 2011)**

A breakdown of Hofstede’s value dimensions descriptions with examples are illustrated below.

Table 2.1. Hofstede’s cultural value dimensions with examples

|  |  |  |
| --- | --- | --- |
| **Value Dimension** | **Description** | **Example** |
| Power Distance (PD) | Power Distance looks at the degree to which less powerful members within a society accept that power is unequally distributed and deals with the attitude surrounding the culture towards such disparities.  Societies with High PD consist of several hierarchical levels and expect authoritative figures to take the lead.  Societies with Low PD have more flat and equal level organisational structures. | High for Asian, Latin, and African countries. Lower for Germanic countries. |
| Individualism vs. Collectivism | People within Individualist societies are to care for themselves and their close family members, ties are looser and the individual is considered more important than the group.  In Collectivistic societies, the group is considered the most important unit and strong opinions against the group are shunned. | Individualism high for Western and developed countries.  Collectivism is high for Eastern and underdeveloped countries. |
| Masculinity vs. Femininity | Scoring high in this value indicates a society is more driven by masculinity traits; i.e. driven by success and competition.  Scoring low indicates a society is more Feminine, being more dominant in regards to caring for others and upholding the value of the quality of life. | Masculinity high in Austria, Japan, Switzerland, Germany,  Moderately in Spain, Thailand and France.  Low in Netherlands and Nordic countries. |
| Uncertainty Avoidance | Societies that avoid uncertainty tend towards strict rules, safety, and security measures.  Societies that accept uncertainty are more accepting of differing opinions, have lesser rules, and lean towards relativist attitudes. | High in Germanic countries, Japan and Latin countries  Lower in Chinese, Nordic and Anglo cultures. |
| Long Term vs Short Term Orientation | Long-Term orientation tends to lean towards thrift and persistence.  Short-Term orientation tends towards respect for tradition.  This dimension refers to how a society preserves links with its past while facing any current and future challenges. Normative societies scoring low on this dimension favor to uphold customs. Those societies that score high, in contrast, take a more practical and realistic approach. | Long term Orientation countires: China, Japan, and Korea.  Short Term Orientation found in Latin American countries. |
| Indulgence vs. Restraint | Indulgence societies tend to allow reasonably free fulfillment of natural human yearnings associated to life pleasure.  Restraint societies believe that there should be limitations and strict norms when it comes to gratification. | Indulgence high in Sweden, Netherlands, Britain and Canada.  Restraint high in Italy, Germany, Eastern Europe and Asia |

On the other hand, an exploration of Malaysia in terms of Hofstede’s Cultural Dimension (based on The Hofstede Centre, 2012) is further explained below.

***Power Distance.*** As reported by Hofstede, Malaysia has a very high score of 100 for this dimension, which means Malaysians consent to a hierarchical order, where everyone has a place and no further explanation is needed. Within an organisation, hierarchy is understood as reflecting inherent disparities, and centralization is popular. Subordinates or those below in rank are likely to be told what to do with no questions asked.  
  
 ***Individualism.*** Malaysia, in the individualism vs collectivism dimension has a score of 26 indicating a collectivistic society. Malaysia is a nation that manifests itself in close long-term commitments to the in-group (the immediate family, extended family, and other extended relations). Within a collectivist culture, loyalty is dominant and prevails above other principles. Everyone is expected to take responsibility for other members in their in-group.

***Masculinity vs. Femininity*.**  With a middle score of 50, an appropriate description cannot be determined for Malaysia for this cultural dimension.  
  
 ***Uncertainty Avoidance Index (UAI)*.** Scoring a 36 on this dimension, Malaysia has a low inclination for Uncertainty Avoidance. Low UAI societies uphold a more stress-free approach. Societies showing a lower degree of UAI are of the opinion that there should be no more rules than are needed and if they are vague or deemed to not work they ought to be eliminated.

***Long Term Orientation*.** Malaysia scores 41 in this dimension, which indicates low Long Term Orientation and signifies that Malaysia is a normative culture. People in such societies have an ultimate interest in establishing the absolute Truth, as well as being normative in thinking. They exhibit great admiration for customs and traditions.

***Indulgence vs. Restraint.*** Malaysia's score of 57 indicates that the culture is one of high Indulgence. Countries classified by a high score in Indulgence commonly display an inclination to realise their desires and needs with regards to life’s pleasures. People in such societies have an optimistic outlook towards life

Here, these dimensions illustrate the deeply embedded values of diverse cultures and impact not only how individuals within a different cultural upbringing behave, but also the manner in which one will potentially act or perform upon being placed in a work-associated setting. The need for cross-national research is vital more than ever because theories established in the West can no longer be assumed to go beyond national and cultural boundaries (e.g., Peng, Peterson, & Shyi, 1991).

Thus, it is important to mention that the existing theoretical understanding of the antecedents, effects, and nature of burnout are chiefly grounded in research conducted in the West. The burnout experience and insight of an individual and the reaction to it may be influenced by cultural factors such as, in societies that are characterised by individualism, people may depend only on themselves and close family members when dealing with such symptoms (due to independence in such societies being highly valued), which may differ with individuals living in a more collectivistic society where support could come from extended family, friends, and society (Hofstede, 2001). These individuals may thus perceive burnout differently, and develop different psychological mechanisms of coping in dealing with stressful and burned out situations. This is similar in the case of work engagement and ways of coping such as individual resilience. Owing to the differences in culture, findings on job burnout acquired from a particular country may not be readily generalisable to another country. At present, studies on academic burnout and work engagement in universities being conducted in the Asian context is indeed lacking. Hence, to acknowledge this gap, this present study sought to look at burnout among groups of academics in Malaysia, a society that is characterised by low rankings of individualism (Hofstede, 2001).

Moreover, burnout is a construct that has been established and, in the majority, been empirically tested in developed industrialised countries (Jamal, 1999). According to Wang, Baba, and Jamal (in Jamal, 1999) their portability and practicality to developing countries such as Malaysia has seldom been tested, although there is a need to do so. In this respect, this study is hoped to contribute to the international burnout and engagement literature by examining the relationship between burnout among academics in a developing country.

Essentially, Malaysia is a nation different from some other nations that manifests itself in close long-term commitments to the in-group as a collectivistic society. Within the Malaysian collectivist culture loyalty is utmost and prevails over other societal rules and principles that foster very strong relationships. Malaysia is also a nation with a low inclination for Uncertainty Avoidance (Hofstede, 2012), i.e. there should be no more rules than are needed and if anything is of a vague nature this ought to be eliminated or reformed entirely.

**2.4 Western Dominance in Psychology**

Where Western dominance in psychology is concerned, Arnett (2008) reported that psychological research published in APA journals has largely focused disproportionately on American subjects, comprising less than 5% of the world’s population. This leads to an understanding of psychology that is somehow incomplete and, for the most part, fails to adequately represent society (Arnett, 2008). Critics have doubted how well American psychological research can be said to represent the whole of humanity, yet a striking feature of most research conducted within psychology remains based this a rather small corner of the population (Arnett, 2008). Moreover, theories and principles developed are mistakenly assumed to apply to human beings in general and universally. Arnett (2008) further contends, rather than solely depending on a psychology that focuses overwhelmingly on just one country (i.e. the United States), there must be a shift to focus on the neglected 95%. This is to ensure there is a broader understanding of psychology to represent the diverse sectors of the human population.

**2.4.1 Western bias**

Issues of Western bias are also continuously reflected in the use of methods including the theoretical frameworks adopted and topics chosen for study (van de Vijver & Leung, 2000). In addition, Moghaddam (1990) also noted that research topics in non-Western countries tend to be dominated by research trends developed in the West. Responding to these issues, Leung and Zhang (1995) concluded that research that assimilates a variety of cultural perspectives is vital to the formation of more valuable and universal psychological theories. Recent theoretical and empirical developments in psychology have brought the field to the point where researchers ought to be heedful of the generalizability of Western findings to other cultural frameworks (Heine & Norenzayan, 2006). Another shortcoming of psychological research is that the majority of the most influential research gives focus to comparisons of North Americans and East Asians. It is perhaps logical that Westerners do generally serve as the point of comparison in these studies, due to the majority of psychological theories arising from such samples; nevertheless, this ought to not always be the case. Heine and Norenzayan (2006) call for cultural psychological research to go beyond comparisons of merely East Asians with Western nations. Currently, despite the growth of cross-cultural research, very little is known about the psychological processes of other cultures in the world.

In regards to employing Western developed measures, the justification for using such measures for the present study is based not only on practicality, but also on empirical findings that they may differ on the most important dimensions of national culture, individualism and collectivism (Hofstede, 2001; Triandis, 2004). It has been suggested by cross-cultural researchers that work attitudes and behaviour of people belonging to a collectivist culture are unlike those in individualist cultures (Carpenter, 2000; Triandis & Suh, 2002; Hoppe, 2004). Hence, due of this, the call to use Western developed measures such as the Maslach Burnout Inventory in counties such as Malaysia is thus needed.

**2.5 Conclusion**

This chapter sets the context for this study by providing some background information on Malaysia and sheds light on the education system in that particular setting, highlighting the current education scenario in Malaysia and providing the specific rationale for focusing on Malaysia specifically. In summary, the general overview of issues within the field about the growth of higher education within the nation and recent developments in the Malaysian government’s support of higher education is provided in this chapter. The related cultural issues in justifying why Malaysia is the area of focus are also discussed.

## Chapter Three: Literature Review

## 3.1 Burnout

**3.1.1** **Definition**

Burnout, as described by Maslach and Leiter (2016), refers to a psychological syndrome of depersonalisation, reduced personal accomplishment and emotional exhaustion that can occur in individuals who work with other people in some capacity. In other words, burnout is defined as a psychological syndrome evolving as a prolonged reaction to persistent job-related stressors (Maslach, & Leiter, 2016). Maslach, Schaufeli, and Leiter (2001) also depict it as a state of exhaustion in which an individual is cynical in regard to the value of their profession and is cynical of their ability to perform. The three main elements of burnout are an overpowering sense of exhaustion, feelings of diminished personal accomplishment, and a disinterested attitude towards the job (Maslach, & Leiter, 2016).

Asensio-Martínez et al. (2017) redefine the main burnout elements: exhaustion as the feeling of having decreased capability to work and function productively in the workplace due to the depletion of emotional resources, excessive demands, and insufficient means available to meet such demands, and depersonalisation as the lack of interest and loss of meaning, feeling indifferent and detached toward one’s job. Reduced accomplishment on the other hand, is defined as the inability to complete tasks on the job due to feelings of extreme incompetence (Asensio-Martínez et al., 2017). In general, burnout is linked to numerous counterproductive job attitudes, which includes that of job absenteeism, lowered productivity, intent to quit, diminished job satisfaction, and lack of organisational commitment (Maslach et al., 2001). In most cases, burnout arises upon the failure of meeting workers’ resources and exercising excessive demands (Maslach & Leiter, 1997).

**3.1.2 The concept of burnout**

The conception of burnout has been constantly changing over the years, and for the most part it has been considered as a phenomenon affecting members of various occupations, not only those working in the human services (Chirkowska-Smolak & Kleka, 2011). Burnout is known to effect all individuals, personally as well as professionally, regardless of occupation (Akgemci et al., 2013) and is described as a crisis of an individual with his or her work in general (Chirkowska-Smolak & Kleka, 2011). In the case of academics, strenuous hours are spent undertaking countless tasks, some of which involve going through articles, publishing, teaching, and solving numerous student problems (Akgemci et al., 2013). This level of engagement can signify emotional tensions and pressure and is often combined with demanding and strainful job conditions, increasing the likelihood of burnout (Maslach et. al, 2001).

The emotional element is the main reason for the rising cases of burnout among academic staff in academia, depending on the working circumstances of a nation (Akgemci et al., 2013). Emotional exhaustion being the main component of burnout is portrayed by emotional states of frustration, anger, depression, and dissatisfaction. Some academics, after intensive communication with their students, notice their emotional energies depleted (Maslach et. al, 2001). To a certain point, they will realize that their devotion towards the job is declining from when they started their careers (Maslach et. al, 2001). Depersonalisation, being the second aspect of burnout is when an individual has a detached view of others, dehumanizing those around them and treating them as objects. The last component, which is reduced personal accomplishment, denotes one’s loss of self-efficacy during the job and the propensity to devalue their achievements negatively (Maslach et. al, 2001). Typically, academics enter into the profession not for financial gain but because they have that inclination to assist those they teach and have a passion for teaching (Maslach et. al, 2001). Upon knowing they are no longer making meaningful contributions through their work, negative evaluations of the self tend to occur (Maslach et. al, 2001).

Academics experiencing burnout usually transfer these detrimental effects to their peers, those they teach, and the organisation where they work. Regardless of these demanding life experiences, many are able to endure and prevail extraordinarily well, and by no means impacting their ability to function professionally and personally. This situation is referred to as “resilience” or one’s capacity to maintain a pattern of low distress and adequate functioning following stressful events (Bonanno, Moskowitz, Papa, & Folkman, 2005). Those found to display psychological resilience are known to have specific personal qualities that support them in facing challenging situations.

Within an academic context, burnout among academics is mostly due to the changing conditions in the universities and the ambiguous institutional expectations imposed on them (Gates, 2000; Lew, 2009). As stated by Grayson and Alvarez (2007) the consequences of burnout on the individual could include that of physiological and psychosocial problems. Researchers also contend that when burnout becomes severe it can lead to the deterioration in both social and family relationships (Cano-Garcia et al., 2005).

Within the context of the present exploration, where the association of burnout and work engagement is concerned, resilience could be a very useful variable to include within the present investigation. Focusing on resilience is most important as it has the capability to mitigate and combat levels of burnout (Ee & Chang, 2010; Nedrow, Steckler, & Hardman, 2013). As academics are models of values and competencies for their students, they ought to be instilled with resilient traits to face challenges and to accommodate students’ needs (Ee & Chang, 2010). As resilience is one of the needed qualities for life in the 21st century, it is crucial to identify to what extent academics are resilient in their everyday dealings (Ee & Chang, 2010). Whilst more and more universities continue to struggle to retain their academic staff, looking into this very issue and exploring the needed precautions are thus vital. Due to this, resilience is an essential factor for academics to possess to execute their duties professionally, proficiently, and to confront the dominant symptoms of burnout.

### 3.1.3 Burnout, years of experiences and career stages

### It is frequently reported that individuals who suffer from burnout are mostly the younger members of staff within an organisation or those with less experience in the field (Cordes & Dougherty, 1993; Hamdan & Hamra, 2017; Lizano, & Mor Barak, 2012; Maslach et al., 2001; Plantiveau, Dounavi, & Virues-Ortega, 2018) although more recently Rozman, Treven, Cancer, and Cingula (2017) and Stanetic and Tesanovic (2013) highlights this issue to be dominant in the older age groups and with those with longer lengths of service. According to past research on academic burnout, younger academics were those most prone to suffer higher levels of emotional exhaustion (Brunsting, Sreckovic, & Lane, 2014; Byrne 1991; Jackson et al., 1993; Lackritz, 2004). This scenario could be due to age factor - closely linked with experiences of work, in which burnout is more of a risk during the early stages of one’s career compared to later (Maslach et al., 2001).

Blix et al. (2006) reported higher exhaustion and cynicism (i.e. components of burnout) scores among less experienced academics (those in the early career stage), than those in the mid or late stages of their career. These two dimensions are often related with an intention to quit among academics (Lee & Ashforth, 1990).

In relating career stages with burnout, Fisher (2011) examined the burnout, stress and coping skills of nearly 400 teachers to determine variables contributing to these major factors. Results show that the burnout levels between new and experienced teachers are significantly different with novice teachers having higher levels of burnout than the more experienced teachers, noting those in the ‘establishment’ or early stage of their career were the most vulnerable. Here, novice teachers are particularly inclined to burnout. These findings coincide with those of Schorn and Buchwald (2007) where the onset of burnout was shown to be prevalent at an earlier stage in the teaching profession.

Maslach and Jackson (1984) reported a different finding from their study of 845 members of the national public contact workforce of the Social Security Administration in the United States. They found that a curvilinear relationship was evident between scores on a measure of burnout and the career stage of employees. Those employees with 1 to 5 years of work experience had lower burnout scores, implying that employees who are newcomers may still be enthusiastic and idealistic about their work and perhaps receiving support and encouragement while they were still new. During the next few years, they may have become more disheartened with the job and find that it is too stressful, explaining the later higher rates of burnout among these junior employees.

Parallel with years of experience and career stage, research has also shown that rank predicts burnout (Byrne, 1991). Faculty members in junior ranks are often allocated heavier teaching loads and, consequently, spend less time doing research when compared to their higher ranking colleagues (Hind et al., 1974; Sabagh, Hall, & Saroyan, 2018) making them more susceptible to burnout. Moreover, higher degrees of burnout have also been linked with academics involved primarily in teaching (Dick 1992; Jackson, 1993). This trend was also similar among pharmacy practice faculty in the United States (El-Ibiary, Yam, & Lee, 2017). Specifically Singh, Mishra and Kim (1998) presented the problem of research-related burnout, where in their study burned out assistant professors carrying out research stated lower ratings of their job satisfaction, owing to the fact they may not earn tenure. According to Jackson (1993), faculty members who were not tenured seem to be more burned out than facuty members who were tenured (Jackson, 1993).

When it comes to novice workers, often, they have unrealistic standards that can not be achieved in the actual working life (Cherniss, 1992). These novice workers are likely to be affected by feelings of disappointment and failure in a situation with work excess and role stress, in addition to the incongruity between expectations and reality (Cherniss, 1992). This situation is labelled as reality shock or transition shock (Duchscher, 2009). The reality shock and the subsequent crisis of competence are believed to contribute significantly to exhaustion, which in the end may lead to burnout (Gustavsson, Hallsten, & Rudman, 2010).

### 3.1.4 Burnout and resilience

### Resilience has several definitions, though the general accepted meaning is the dynamic process of positive attitudes and effective strategies that an individual utilises in response to life stressors and challenges or, the capability to bounce back during hardship (Jensen, Trollope-Kumar, Waters, Everson, 2008). Masten, Best, and Garmezy (1990) describe resilience as ‘the process of, capacity for, or outcome of successful adaptation despite challenging or threatening circumstances’ (p. 425). According to The American Psychological Association resilience is adapting oneself following situations such as involving adversity, disaster, trauma, or significant sources of stress including issues relating to the family, relationships, problems with one’s health, financial stressors and workplace conflicts (American Psychological Association [APA], 2011). According to Fergus and Zimmerman (2005) resilience is perceived as a positive feature for one’s adaptation and, for that reason, it ought to lead to an advantageous adjustment. This is as to retain one’s health within a moderate level when it comes to disadvantageous situations (Masten, 2001; Windle, 2011).

In the educational setting, teachers are considered role models for values and competencies and, as such, ought to be instilled with resilient traits that can later be developed in their students (Ee & Chang, 2010). In a study conducted by Gibson and Dembo (1984) resilient teachers were found to be those determined in the face of setbacks and mostly equipped with a high level of self-efficacy. Other studies have also shown that resilient teachers have a higher tendency to be open to new ideas to cater to their students (Cousins & Walker, 2000; Guskey, 1988). Moreover, they are the ones exhibiting a greater level of enthusiasm (Allinder, 1994). These studies show that resilient teachers are likely to have a positive nature that sustains their capacity to bounce-back, even in times of setbacks and adversities. Although studies on resilience to date have widely centred on physicians, nurses, and other human professions within health care settings, the available studies on resilience in educational settings generally focus on teachers in schools, where such findings are thus restricted to a teacher’s work scope and the challenges faced in schools and within the school environment.

Links between psychological resilience and various mental health outcomes such as depression, burnout, anxiety, and secondary traumatic stress have now been shown in previous studies (Mealer et al., 2012; McGarry et al., 2013). For example, McGarry et al. (2013) conducted a study among Australian health professionals working in a paediatric hospital shows that a low prevalence of burnout was associated with a higher level of resilience. Correspondingly, Mealer et al. (2012) in their study done in the United States found that high resilience was related to low levels of burnout and anxiety in their sample of 744 intensive care nurses.

Studies conducted in varied work populations have also shown similar findings when it comes to the variables of resilience and burnout (Edward, 2005; Gito, Ihara, & Ogata, 2013; Lo, 2014) indicating a negative association between resilience and burnout, and signifying the possible moderate effect resilience has on burnout. As described above, studies with numerous working samples have found that an individual’s resilience level is significantly linked with burnout.

Lo (2014) in a sample of teachers in Hong Kong from seven special schools for maladjusted students examined burnout and stress levels and their association with individual and organisational resilience. What made these educators become resilient while teaching in such a demanding school setting is further investigated. Results indicated being unprepared for and overwhelmed by job duties, a lack of support as well as a sense of disempowerment are among the sources of stress emerging from the data. It was also found there are relationships among burnout, stress, and resilience, and it was revealed that sensible coping behaviours and optimism are personal resources that aided these educators in defeating the burnout and stress

Gito, Ihara, and Ogata (2013) studied the link between resilience, depression, hardiness, and burnout among Japanese nurses working in psychiatric hospitals. A 32-item ‘Resilience Scale for Nurses’ (RSN) was distributed to a potential sample of 327 nurses. For the purpose of evaluating burnout, the ‘Japanese version of Burnout Scale’ was used. Negative correlations of the RSN were found with the Beck Depression Inventory (-0.26; p<.01) and the Burnout Scale (-0.31, -0.27 and -0.30; p<0.01). From this research, as expected, the RSN was found to have negative correlation with depression and burnout. In other words, nurses with higher levels of resilience are most likely to experience less depression and burnout. Generally, many of these nurses who endure emotional burnout and suffer from depression eventually end up abandoning their profession. Hence, questions arise as to why some nurses can cope with workplace adversity and find job satisfaction but others are unable to do so.

Akgemci et al. (2013) examined the effect of resilience on the levels of burnout among academics (n = 44) at the faculty of Selcuk University in Turkey. Findings show psychological resilience negatively affects burnout, which is concurrent with that of other previous research. In the study, an increase in the level of resilience causes academics’ level of burnout to lessen. This demonstrates a negative relationship between burnout and resilience. The authors further explain that those equipped with higher levels of resilience will without doubt be far more successful and competent when it comes to working in the organisation. Resilient individuals tend to evaluate stress or stressful situations as an adaptive process and sustain their mental health by utilising effective coping strategies (Akgemci et al., 2013). For that reason, developing the resilience capacity of academics’ can henceforth provide institutions of higher education with momentous benefits.

Garcia-Izquierdo, Rios-Risquez, Carrillo-Garcia, and Sabuco-Tebar (2015), explored the role of resilience as a moderator in the relationship between the perception of psychological health and academic burnout, found that resilience, burnout, self-efficacy, and psychological health all had significant relationships. Resilience was seen to have played a moderating role on psychological health in burnout situations, revealing students indicative of higher resilience attaining better scores when it comes to academic efficacy and scoring much lesser in burnout. Those students with a higher level of resilience were seen to undergo a reduced amount of burnout. This finding however is only representative of nursing students at the University of Murcia in Spain due to the researchers employing a convenience sample, hence it may not be generalised to other populations across the globe.

From the above studies, it can be established that occurrences of burnout within the work setting are expected to lessen if an individual was to be imbued with the appropriate level of resilience. When individuals have high resilience instilled in them, the prospect of them to fall victim to burnout are lesser. They are also more likely to respond to such adversity or stressful events in a much healthier way, “bounce back” after trials and cope better following hardship, while also growing stronger and healthier along the way. Although for the most part, negative associations were found in previous studies with regard to burnout and resilience, the need to explore further the relationship between burnout and resilience within the Malaysian university environment remains a necessity.

**3.1.5 Engagement and burnout: Opposing psychological phenomena in the workplace**

Initially, burnout was described as a negative state of mind, and later on when a broader and more positive view began to spread in the 1990s, Maslach and Leiter (1997) rephrased burnout as an erosion of a positive state of mind and labelled it as engagement (Maslach & Leiter, 1997). By implication, engagement is assessed by the opposite pattern of scores on the three MBI scales: unfavourable scores are indicative for burnout, whereas favourable scores are indicative of engagement (Schaufeli, Leiter, & Maslach, 2009). Schaufeli and colleagues (2009) alternatively took a different approach to this concept by defining and operationalizing engagement in its own right. Despite agreeing with the position of engagement as the positive opposite of burnout, they disagreed to the operationalization of measuring engagement by using the opposite scales of the MBI scores and as an alternative established the Utrecht Work Engagement Scale (UWES) to measure engagement (Schaufeli, Salanova, Gonzalez-Roma, & Bakker, 2002).

According to Mojsa-Kaja, Golonka, and Marek (2015) burnout and work engagement are mostly described as being in contrast with one another and at opposite ends of one another in the relationship individuals establish with their occupations. Similarly as stated by Maslach and Leiter (1997 workers who are positively engaged in their work are customarily those who are not burnt out. Empirical confirmation of the correlation between burnout and work engagement have constantly been found through previous researchers (Hyvonen, Feldt, Salmela-Aro, Kinnunen, & Makikangas, 2009).

The shift in burnout research from a completely negative approach towards a more positive psychological condition was in accordance to the rise of Positive Psychology (Schaufeli et al., 2009). Persistent interest in this matter has stimulated the scientific community’s move towards a constructive outlook of burnout, restating it as the wearing down of engagement. Within the academic world, psychology has clearly been dominated by the negative (Seligman & Csikszentmihalyi, 2000). Henceforth, the recent call for a more balanced approach that comprises not only of job strain but progress and betterment of workers as well (Bakker & Schaufeli, 2008). An example of this balance approach is the Job Demands–Resources (JD-R) model seeking to enlighten negative outcomes (burnout) as well as positive outcomes (work engagement) aspects of well-being (Bakker & Demerouti, 2007; Schaufeli, Bakker, & Van Rhenen, 2009).

Two trends have lately emerged in burnout research and have broadened the conventional notion and scope (Maslach, Schaufeli, & Leiter, 2001). The first trend is where the burnout concept was initially closely associated to the human services such as education, health care, and social work. This however has been expanded towards all other occupational groups and not only human services. The second trend is the shift in the burnout research towards giving more emphasis to its opposite extreme of work engagement. As an alternative to looking wholly to the negative extreme, researchers have recently widened their interest to the positive side of employees’ well-being, reflecting an evolving inclination towards a positive psychology, focusing on human strengths and ideal functioning instead of merely malfunctioning and human flaws (Seligman & Csikszentmihalyi, 2000).

Positive psychology is regarded as the study of optimistic trait qualities and positive emotions (Seligman, Steen, Park, & Peterson, 2005). Findings from research conducted in the realm of positive psychology are intended to supplement and not replace in terms of human suffering, disorder, and weaknesses (Seligman et al., 2005). The key goal of this positive psychology is to discover the more severe state of an individual by means of positive strengths of character, life experiences, and how such elements serve as a shield against a certain disorder or condition (Duckworth et al., 2005). Positive psychology publicises strengths and building the best in life, as well as satisfying the lives of healthy people and healing those who are distressed (Seligman & Csikszentmihalyi, 2000).

Numerous attempts have been made by researchers along the years to assimilate these two lines of burnout and work engagement (Bakker & Demerouti, 2007; Bakker, Demerouti, & Sanz-Vergel, 2014; Demerouti, Bakker, Nachreiner, & Schaufeli, 2001; Schaufeli & Bakker, 2004; Denton et al., 2008). Past studies incorporating both of these elements have found the two concepts display negative correlations, implying the two different qualities of a person’s experience (Klusmann, et al., 2008a). Work engagement is considered an important concept due to the positive boosts it transmits to individuals’ well-being at work, their work behaviour, as well as the organisation at large, though the primary boost is seen as the positive experience that work engagement induces to the individual (Schaufeli et al., 2002). Secondly, work engagement is known to be related to well-being and constructive emotional feelings towards one’s work (Demerouti, Bakker, de Jonge, Janssen, & Schaufeli, 2001) and also aids one suffering from taxing work to overcome a particular adversity (Britt, Adler, & Bartone, 2001). In a constantly changing world, the possible solution to the concern of competitive advantage may perhaps be by having engaged employees in their work (Macey & Schneider, 2008).

## 3.2 Work Engagement

**3.2.1** Definition

Work engagement is generally described as a rewarding, optimistic, occupational frame of mind or, as mentioned by Bakker and Schaufeli (2008), characterised by vigour, dedication, and absorption. Vigour is when one has elevated levels of determination and resilience whilst doing work. Dedication is being strongly engrossed in work and simultaneously feels a sense of meaning and enthusiasm. Absorption is described as being very contently absorbed in a particular task, focused and face problems detaching oneself from the task (May, Gilson, & Harter, 2004; Schaufeli & Bakker, 2004). Engaged employees are those who display a greater degree of determination, are more passionate, and have a keenness about their work.

**3.2.2 The concept of work engagement**

The concept of engagement was initially established by Kahn (1990) who stated that employees who are engaged are the ones who puts a lot of effort into their work due to them actually identifying with it. The engaged person is thought to be in a dynamic, dialectical relationship with his or her work role, allowing this person to express themselves (Kahn, 1990, 1992). Interestingly, research in regards to burnout has been the most stimulating among the current research on work engagement (Bakker, Schaufeli, Leiter, & Taris, 2008).

Maslach and Leiter (1997) contends that engagement is characterised by three dimensions, namely vigour, engrossment, and efficacy that address the direct opposites of the burnout dimensions. Alternatively, a different judgment deliberates that work engagement is distinct and an independent concept altogether in its own right and negatively related to burnout.

## 3.2.3 Engagement, burnout, and antecedents

## Due to burnout and engagement having imperative consequences for individual employees and organisations at large, numerous studies have focused on the antecedents of both of these concepts collectively (Bakker et al., 2014; Schaufeli, et al., 2002; Schaufeli, Martinez, Marques Pinto, Salanova, & Bakker, 2002; Schaufeli et al., 2009). Such questions may evaluate the working conditions that should be targeted to prevent burnout and nurture work engagement, and the types of job resources needed to buffer the impact of job demands on burnout, as well as those resources that can aid in further fostering work engagement (Bakker et al., 2014).

While job demands are considered the most dominant predictors of burnout, job resources are the main predictors of work engagement (Schaufeli & Bakker, 2004). Such examples of job resources may include: support given by co-workers, coaching derived from leaders, and performance feedback (Schaufeli & Bakker, 2004). Interestingly, even though Schaufeli & Bakker (2004) also incorporated job demands in their study, job resources were the exclusive predictors of work engagement. The effects of job resources on engagement have also been found in longitudinal research conducted by Mauno, Kinnunen, and Ruokolainen (2007) with health care personnel. They found that employees with a higher level of job control in 2003 exhibited a higher level of engagement two years later in 2005.

In Mojsa-Kaja et al.’s (2015) study, burned-out and engaged teachers can be differentiated from the degree of alignment between work life areas and their preferences, as well as their personality profile. Teachers who were burned-out professed a higher mismatch when it came to themselves and the work setting, workload, control, rewards, community, and fairness than those teachers who were more engaged. The engaged teachers, on the other hand, reported lower negative affectivity and higher self-directedness in comparison to the burnout group. Although the study did provide insights into the role of individual factors in the development of teacher burnout and engagement, the investigation was limited due to it being cross-sectional and, therefore, the causal relationships between the variables was not possible. In addition, all the data were based on self-reports. In regards to the sample, this study only included Polish teachers, hence, the socio-cultural context could also be a significant factor. Mojsa-Kaja et al.’s findings nevertheless corroborate the ideas of Macey and Schneider (2008), that personality could have a chief role in work engagement due to individuals with a certain personality are better at utilising their job resources than those with another type of personality profile.

**3.2.4 Past research on work engagement**

Salmela-Aro, Tolvanen, and Nurmi (2009) examined the influence of achievement strategies measured during university studies of individuals with relation to their burnout and work engagement levels later in their careers. Participants (students, n=292) completed the work burnout inventory (three-times) and work engagement inventory (twice) during the onset of their career. This was achieved at three-time points (10, 14, and 17 years) later. Findings show that a high and growing optimism during university predicted a higher level of engagement and lower levels of burnout during the three-time points. In contrast, a high level of task-avoidance during university foretold lower work engagement and a higher degree of burnout during early career. Nevertheless, this study sample is only consisting of university students per se and thus may not be illustrative of the overall population of young adults.

With regard to engagement and personality, Langelaan, Bakker, van Doornen, and Schaufeli (2006) found that personality traits (neuroticism and extroversion) generally contribute contrarily to burnout and engagement. Researchers have yet to treat this issue with greater depth. Langelaan and et al. (2006) investigated whether burnout and work engagement can be differentiated on the basis of personality and temperament. It was hypothesised that engagement is characterised by high extraversion and low neuroticism while burnout by high level of neuroticism and lower levels of extraversion. High neuroticism was found to be the fundamental, distinguishing feature of burnout, a combination of low neuroticism with high extraversion and high levels of mobility (the capacity to adapt to changing environments) was associated with work engagement. Results of Langelaan et al.’s (2006) study show that, without a doubt, differences within the individual on the basis of their disposition and temperament do play a significant role in distinguishing groups of employees in terms of high and low levels of work engagement and burnout.

In regards to the qualitative side of engagement diary studies have revealed that engagement differs considerably within individuals. Sonnentag (2003) assessed work engagement in public service employees through five working days and findings show that 42% of the overall variance was at the within-individual level and 58% of the overall variance was at the between-individual level. Likewise, in another study conducted among flight attendants; their work engagement was measured during three trips to worldwide destinations. Reports show an overall variance in work engagement owing to within-person variation by 41% (Xanthopoulou, Bakker, Heuven, Demerouti, & Schaufeli, 2008). Bakker and Bal (2010) tested a weekly work engagement model among Dutch teachers and found a substantial variability in teachers’ weekly engagement. Taken together, these studies show that although there are differences in the overall level of work engagement among individuals, day-level (Sonnentag, 2003) and week level (Bakker & Bal, 2010) studies suggest that individuals do not display the same level of engagement in their work day to day, due to work engagement displaying a considerable difference across short periods of time. Similarly, Kahn (1990) also postulates that it can be assumed that day to day variabilities in the experience of engagement within one person are common.

Therefore, based on the above mentioned research on work engagement, not only can engaged individuals at work be identified, but engagement levels too which varies from day to day within the same person can be recognised.

### 3.2.5 Work engagement and resilience

### The association between teacher resilience and teacher well-being as well as engagement has frequently been explored in the past (e.g., Brunetti, 2006; Chan, 2003; Howard & Johnson, 2004; O’Sullivan, 2006); nonetheless, recently, research on resilience has been expanded to include the more everyday resilience that is representative of the ordinary course of life (Martin & Marsh, 2008). This ‘everyday resilience’ is known as buoyancy. According to Martin and Marsh (2008) buoyancy is defined as a person’s self-perception of their ability to effectively deal with obstacles and trials that are typical of everyday life (for example, poor performance, competing deadlines, challenging tasks, stress, etc.). Buoyancy is described as a person’s skill in dealing with challenges, struggles and obstacles in one’s daily work or life (Martin & Marsh, 2008). Thus, buoyancy is more fitting when it comes to understanding the difficulties present in more typical populations, for example teachers, while traditional ideas of resilience are seemingly suitable to a somewhat small (but significant) fraction of the population.

Othman and Mohd Nasurdin (2011) investigated the link between resilience and hope with work engagement in 422 staff nurses working in Malaysia. Findings from a regression analysis show that resilience and hope were positive factors related to work engagement and that hope was a significant predictor of work engagement. Likewise, resilience was also found to be related to work engagement. This finding mirrored that of previous research. As mentioned by McGrath, Reid, and Boore (2003), nurses are unceasingly faced with suffering, death and grief in their patients, and in addition to that they have repetitive tasks to accomplish. Under these conditions, hope and resilience may possibly be a crucial resource necessary for individuals to cope with demanding events and employment settings. Hence, public hospital nurses scoring high in the hope and resilience elements were predicted to be more receptive to change, capable, and determined in handling any workplace hardship, to which, will boosts their engagement.

Howard and Johnson (2004) in their study of teacher stress and burnout looked at it from a more positive light. Rather than looking at “what’s going wrong”, teachers who are able to cope successfully with the same kinds of stressors were asked “what’s going right”. This study, contrasting with others, provides some elaboration on the international problem of teacher stress and burnout. By adopting a resilience perspective, the authors were able to identify a small group of teachers who unceasingly manage well with severe job pressure. A strong support group, a sense of agency, taking pleasure in achievements and competence in areas of personal importance are all major protective factors reported. In general terms, these protective factors and processes appear consistent with the coping skills identified by larger scale studies (e.g., Borg & Falzon, 1990; Cockburn, 1996; Kyriacou, 2001).

In regards to the relationship between individual and contextual factors, some studies have also revealed how several features grouped together would signify those teachers who were more resilient than those who are less resilient. Such research was done by Klusmann, Kunter, Trautwein, Ludtke, and Baumert (2008b) with a sample of German teachers. The authors identified four categories of teachers in regards to their self-regulatory behaviour: 1) the healthy type, described as ambitious, scoring high in terms of both work engagement and resilience; 2) the unambitious type, having low engagement scores, however with high resilience; 3) the ambitious type, teachers with extremely high ratings on engagement, nevertheless low ratings on resilience; and finally 4) the resigned type, achieving low ratings for both engagement and stress resistance. It was found that healthy type teachers were those with the best adaptive personalities and were seen to be more resilient. On the other hand, the excessively ambitious type were seen to be the ones at long-term risk, both professionally and personally. In addition, teachers labelled the healthy type, gaining the lowest scores on emotional exhaustion and highest scores on job satisfaction, were considered to be more positively received by their students, where students reported having a more favourable experience with them.

### 3.2.6 Engagement and career stages

### Even though the amount of research in regards to generational cohorts exists in quite large numbers, not all findings are supported by empirical research and due to this, linking the concept of work engagement to the different generational cohorts is difficult (Hoole & Bonnema, 2015). The assumption that older individuals do not find meaning in their career and are less engaged is thus a misconception (Hoole & Bonnema, 2015). Hoole and Bonnema (2015) found an existing moderate relationship between work engagement and meaningful work in different generational cohorts. Participants (n = 261) across financial institutions in South Africa responded to the Utrecht Work Engagement Scale and Psychological Meaningful Scale. The participants comprised three cohorts: Baby Boomers (those born between 1944 and 1964), Generation X (born between 1965 and 1979), and Generation Y (1980 and 1994), respectively. The highest levels of engagement and meaningful work was displayed by Baby Boomers. Significant differences were found between Baby Boomers and Generation X, as well as Baby Boomers and Generation Y. This study has shown that the assumptions that older workers are lacking in work engagement and give less commitment towards work are unproven. In both instances, Baby Boomers outperformed their younger equivalents in both work output and engagement levels.

Hoole and Bonnema’s findings suggest that older employees are very much valued resources and may contribute significantly to the success of an organisation, though may have dissimilar needs and values compared with those in the other age groups. Findings show that Baby Boomers had the highest level of engagement, mirroring that of previous research (i.e. Coetzee and De Villiers, 2010). Various factors could be the reasons for the differences in the levels of engagement between cohorts. For instance, if Baby Boomers are highly motivated, devoted, and determined (Drewery, Riley, & Staff, 2008; White, 2011), it can be concluded that these individuals may be more engaged in their work in order to accomplish such goals. The differences can also be attributed to varying generational experiences that influence behaviour (Glass, 2007). Other factors such as personality factors and temperament, as suggested by Langelaan et al. (2006), may also play a role in contributing to some of the observed variances.

Kirkpatrick (2007) conducted a qualitative investigation of the job engagement of teachers (n = 12) with 4-10 years of teaching experience (second phase of teaching). According to Kirkpatrick (2007) teachers at this particular stage are an essential nevertheless seldom studied subgroup of teachers. In general, those interviewed described themselves as being engaged in their jobs, however their engagement levels differed by how much they invested in their job duties. This differed to when they were in their beginning years as the confidence and competence they have built since had provided them with more flexibility in allocating the time and energy needed. This in turn enables them to make the proper adjustments (e.g. time and effort) when investing in their teaching. This study suggests that teachers’ level of investment and engagement possibly will boost in the second stage of their career due to their improved skill in managing their time.

### 3.2.7 Engagement in teachers

### In a study focusing on engagement within the teaching profession, Klusmann et al. (2008a) examined the link between the specific demands of the school and its resources, engagement, and burnout rates among secondary teachers in Germany. The study was fruitful as it was able to identify what predicted higher levels of engagement in the teachers, specifically when teacher characteristics were controlled and support were given by the principal in terms of educational matters. Additionally, when students’ disciplinary problems in the classroom were present, this projected a higher level of burnout in the teachers. Although data did show association with engagement and exhaustion, this result may be explained by individual differences in the teachers that may incline them to breed either more engagement or exhaustion. What can be concluded from this study is that an absence of burnout symptoms does not necessarily mean that teachers are highly engaged in their work. Similarly, teachers who display highly engaged behaviour whilst teaching may also be suffering burnout and emotional exhaustion in the process (Klusmann et al., 2008a).

Simbula, Guglielmi, and Schaufeli (2011) investigated the well-being of Italian teachers in a longitudinal study at the start of the academic year, the end of the first term, and the end of the academic year. As hypothesised, both job and personal resources seem to play an essential role in clarifying work engagement signifying that when teachers recognise the possibility of fostering new abilities to assist students in their learning, are self-efficacious and receives the supported needed from their colleagues and principal, the likelihood of them being more engaged at the end of the first term and the end of the school year is higher (Hakanen et al., 2006). Furthermore, results show that a link between work engagement with job resources and personal resources over time (i.e. 4 and 8 months later). This finding is consistent with Fredrickson’s (2001) theory, where he suggests that engaged workers may create opportunities to learn and develop at work, have the ability to mobilise support from colleagues and supervisors, as well as build the necessary job resources.

## 3.2.8 Work engagement across cultures

With the growth of occupational health psychology, increasingly, researchers are now interested in exploring the impact of employee well-being in varied populations. In a cross cultural study on work engagement conducted by Shimazu, Schaufeli, Miyanaka, and Iwata (2010), results suggest that exceptionally low scores from Japanese on the UWES-9 do not necessarily point to low work engagement though, on the contrary might indicate that there are reduced measurement accuracy of the scale when it comes to the Japanese sample. A possible cause of this may be the inclination for restraining the display of positive affect found in Japanese society (Iwata, Roberts, & Kawakami, 1995). The results also suggest that achieving exceptionally high scores on the original UWES-9 do not inevitably indicate high engagement in one’s work. This trend has constructive psychological and social significance within a culture that is known to nurture and promote the freedom and uniqueness of the self (Kitayama, Markus, Matsumoto, & Norasakkunkit, 1997). Hence, it is advisable to always give caution when comparing low engagement scores among Asian individuals and high engagement scores among Western individuals. The need for more psychometric studies are essential in order to differentiate individuals with low work engagement in different cultural nations, so that work engagement in other Asian countries can be differentiated with other Western countries and vice versa. In due course, precise measurement renders further understanding and generalizability of the work engagement concept across different cultures.

As mentioned, with the progression of occupational health psychology on the rise, more and more researchers are now concerned with the exploration of the impact of employee well-being, including work engagement, the positive and rewarding work-related state of mind, and burnout, as well as resilience among diverse groups. This is because the current literature available, thus far, has given more attention towards Western dominated samples and, as a result, access to research that is more culturally varied in terms of sampling continues to be unequally distributed. Lamenting the on-going Western dominance in psychology, the need to discuss the issue of work engagement and burnout among educators in an Asian setting is therefore essential and this gap serves as one of the reasons why this present research is carried out.

### 

**3.3 Theoretical Framework of the Study**

This study was guided by four main theoretical frameworks, the Job Demands-Resources (JD-R) model (Bakker & Demerouti, 2007; Demerouti et al., 2001), Baltes’s Life-Span Developmental Framework (1987), Huberman’s (1989) Teachers’ Life-Cycle Theoretical Model, and Bronfenbrenner’s Ecological Systems Theory (1979).

### 3.3.1 The Job Demands-Resources (JD-R) model

### JDR offers useful means to predict employee burnout and consequently organisational performance among individuals. One central assumption of the JD-R model is that even though every profession may have its own particular work characteristics linked with burnout, it is nevertheless possible to model these characteristics in two main categories, that is, job demands and job resources. According to Bakker, Demerouti, and Verbeke (2004), job demands are described as those aspects of the job relating to physical, psychological, social, or organisational areas that necessitate continual physical or psychological effort and are thus linked with certain physiological or psychological costs. Examples of job demands may include role overload, emotional demands, a high work pressure, and poor environmental situations.

On the other hand, job resources are the social, physical, and psychological elements of the career that aid a particular individual in the accomplishment of work objectives that simultaneously help in decreasing job demands (Bakker et al., 2004). Job resources located at the level of the organisation such as job security, career opportunities, interpersonal relationships (support from administrative staff, good interaction with students within the educational setting, and encouraging colleagues), the level of the task (e.g., skill variety, performance feedback) and the organisation of work (Bakker et al., 2004). A wide array of research has provided evidence for the existence of two concurrent processes, that is, that a greater degree of high job demands depletes employees’ mental and physical resources and as a result leads to the exhaustion of energy and to health problems, known as the health deficiency process (Bakker, Hakanen, Demerouti, & Xanthopoulou, 2007). In contrast, job resources nurture employee engagement and enhance performance on the job (Bakker et al., 2004).

The JD–R model, representing an organisational psychological standpoint, suggests that burnout and work engagement could be due to a variability of aspects of the work surroundings that can be integrated into a relatively simple model. Exposure to job demands is predictive of exhaustion, whereas job resources are the most important predictors of work engagement and diminished cynicism (Bakker et al., 2007). This is in line with Social Cognitive Theory (SCT), a psychological model of behaviour that emerged primarily from the work of Albert Bandura (1977, 2001). SCT predicts mutual relationships between self-efficacy and positive affective–cognitive outcomes, e.g. work engagement. These reciprocal relationships are congruent with the concept known as “gain spirals” in the Conservation of Resources (COR) theory and the presence of a descending “loss spiral” has also been confirmed, whereby high job demands leads to exhaustion, and simultaneously contribute to a higher degree of job demands over time (Demerouti, Bakker, & Bulters, 2004).

### 3.3.2 Baltes’s life-span developmental framework (1987)

### Baltes’s life-span model focuses on the life span development of humans. In view of that, individuals possess resources (e.g. mental, social, physical, and environmental) that are restricted at any specific point in time. Throughout a person’s life, individuals are faced with numerous opportunities for example education prospects or advancement and also demands such as sickness, psychological stress, and physical decline that entails choices about the distribution of these restricted resources mentioned above (Gorgievski, Halbesleben, & Bakker, 2011). Baltes’s (1987) life-span developmental framework was chosen for this study due to its conceptualization of how individuals continue to develop as they age and at the same time cope with unique developmental trials and accomplishments. This, in relating to the present study implies such trials, for instance of facing stress and burnout. The interplay between these trails and accomplishments with that of adaptive processes are constantly at work during the life span and through each of the major life periods (Baltes, 1987), aiding academics in developing maturity and the ability to better cope with unavoidable adversity and suffering.

On the other hand, Huberman’s teachers’ life-cycle framework (1989) was chosen to help guide this study as it conceptualises the most appropriate model for educators’ career cycle – one which encourages and supports teachers in their career development. Huberman identified several stages in the career cycle: 1) Survival or Discovery stage (1-3 years); 2) Stabilization (4-6 years); 3) Experimentation (7-18 years); 4) Reassessment/Self-doubts (between the 12th and 20th year of teaching); 5) Serenity and Conservatism (19-30 years) and lastly, 6) Disengagement (31-40 years). Huberman notes that these phases represent stages that teachers were most likely to go through; nonetheless, not all stages would necessarily reflect the cycle of any one particular teacher. Although typically, Huberman’s life-cycle framework serves the career development of teachers in schools. The main stages suggested by Huberman may serve as a strong groundwork for the exploration of university academics’ careers stages of this study.

### 

### *3.3.2.1 Life-span development in relation to career stages, burnout and resilience*

### Life span developmental psychology is the study of ontogenesis, i.e. the development of an individual from conception to old age (Baltes, 1987; Baltes & Smith, 2004; Baltes, Staudinger, & Lindenberger, 1999; Staudinger & Lindenberger, 2003). A common belief in life span development is that growth does not end or conclude in adulthood (maturity), nevertheless, it lasts much longer extending across the entire life course with lifetime adaptive processes involved (Baltes, Lindenberger, & Staudinger, 1998). A further basis is that the concept of life span psychology is very substantial in shaping the evidence about lifelong adaptive processes, although to do so, it is essential to foremost reformulate the conventional concept of development to fit such purpose.

Researchers and theorists from this school of thought are of the assumption that during each major life period there exists developmental trials and achievements during the life span (Baltes, 1987; Chibucos, Leite, & Weis, 2004). In better guiding the study of human development, Baltes (1987) expressed a set of principles within the framework of life span development. He argues that these principles form a set of solid principles, which specify a clear view of the nature of development. It is due to the application of these beliefs as a coordinated whole which typifies the life-span approach (Baltes, 1987).

Much of life-span research deals with adult development and aging. The second half of life is beset with many negative stereotypical expectations, such as the belief that old age is largely a period of decline and hopelessness (Staudinger, Marsiske, & Baltes, 1993). However this is not always the case. In fitting the notion of burnout and career stages within the theoretical framework of the lifespan perspective, for instance Etzion (1988) found among women engineers in the United States, as they get older and in the later stages of their careers, tend to perceive themselves as being more successful and less burned out, in addition to enjoying their work more. As women get older and their children become more independent, the strain of performing the duties of a mother and managing a job decrease. With age, the level of self-confidence of these women significantly increases. These findings support other research on professionals (Hsu, Chen, Jiang, & Klein, 2003; Menguc & Bhuian, 2004; Sorensen, & McKim, 2014), who in mid or later career stages are characterised as having more positive attitudes towards life, perceiving their career to be more rewarding, having increased job satisfaction and enjoying a more varied and satisfying lifestyle. Here, the levels of burnout appear to decrease in later stages of adult development allowing for more gains rather than loss of one’s life/career, which counters the belief that old age is largely a time of deterioration and hopelessness, as mentioned above.

In regards to resilience, there is considerable overlap between definitions of resilience and lifespan views of developmental reserve capacity among researchers (Staudinger, Marsiske, & Baltes, 1995). According to Garmezy (1991), resilience is described as “the capacity for recovery and maintained adaptive behaviour that may follow initial retreat or incapacity upon initiating a stressful event” (p. 459). Resilience is a key concept within developmental psychopathology, which conveys the idea that individuals can evade negative outcomes in spite of the presence of major risk factors in their surroundings (Staudinger, et al. 1995).

### *3.3.2.2 Concept of resilience from a life-span perspective*

### In translating life-span ideas within the language of resilience, Staudinger et al. (1993) assert that gains in development can be defined as protective factors and losses as risk and hazard factors. Undeniably, old age has often been associated with that of the depletion of reserves through multiple losses, often occurring simultaneously or within a short period of time (Schaie, 1989; Staudinger et al., 1993). Furthermore, Staudinger et al. (1993) mentions that if aging individuals are encountering many losses, developmental reserves made accessible to them are much fewer to invest in their development and growth. This is due to when a person increases in age it is characterised by an overall limit in the range of reserve capacity or plasticity (Staudinger et al., 1993). Correspondingly, in regards to academics, as they move along their career the need for resilience to counter difficulties (e.g. phases of burnout) is therefore very vital.

Aldwin (1991) highlights that older adults are more flexible in adapting their coping response and resilience to the characteristics of the situation (i.e., controllability) compared to younger adults. Older adults were also seen as more flexible compared to young adults and better at adjusting to altered situations (Brandtstadter & Renner, 1990).

### *3.3.2.3 Concept of burnout and early career burnout in life-span development*

### In investigating burnout, age has been regarded as the most reliable demographic predictor (Maslach, Schaufeli, & Leiter, 2001). As in Rudman & Gustavsson’s (2011) study, where a cluster analysis on beginner career nurses was performed, results show that there was a significant association between age and burnout. Five of the eight trajectories found in the cluster analysis were of younger nurses’ trajectories with the highest levels of burnout. The two trajectories with highest levels of burnout were comprised of a greater number of young persons (less than 25 years) who had no children, had high levels of health-risk factors (consumed alcohol, lack of self-esteem in terms of performance, depression) and those feeling inadequately prepared for working life. In contrast, those in the two trajectories with the lowest levels of burnout were older (over 35 years), had children, and displayed a reversed pattern on the health related factors (Rudman & Gustavsson, 2011).

The notion of early career burnout originates from studies of how early professionals within the human services experienced it for the first time in their professions (Djordjevic, 2010). Often, novice workers have unrealistic standards that could not be achieved in the actual working life (Cherniss, 1992). The novice workers are likely to be affected by feelings of failure in a situation with work excess and role stress, in addition to the incongruity between expectations and reality. This situation is labelled as reality shock or transition shock where the higher the expectations and the harsher the demands of reality are perceived to be, the bigger the discrepancy and thereby the crisis of competence (Duchscher, 2009). The reality shock and the subsequent crisis of competence are believed to contribute significantly to exhaustion, which in the end may lead to burnout (Gustavsson, Hallsten, & Rudman, 2010).

Djordjevic (2010) states that work factors unquestionably contribute to placing newcomers in a vulnerable position for burnout. Those younger in terms of age and novice in the field seem to be predominantly vulnerable to early-career burnout, due to being linked with higher burnout levels (Maslach et al., 2001; Poncet et al., 2007; Rudman & Gustavsson, 2011).

### 3.3.3 Teachers’ professional life cycles

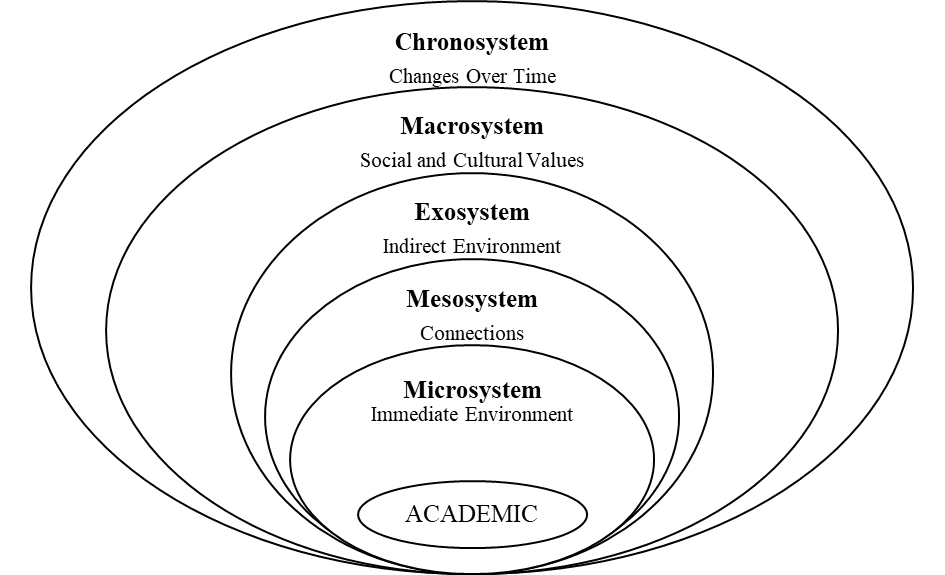
### Some researchers have tried to establish qualitatively different phases of teachers’ careers (Day & Gu, 2010) whilst others try to reconstruct the learning of teachers over time (Lortie, 1975). The characteristics of these studies is that they seldom relate to teachers’ lives outside school, but are more concerned with the professional work life of teachers. Some studies do however pay attention to the relation between teachers’ personal and working lives (Day, 2000; Day, Sammons, Stobart, Kington, & Gu, 2007; Goodson, 2008) and some researchers on the other hand have also added the past and present social positioning of teachers’ work and life to their research approach (Goodson & Sikes, 2001).

As mentioned earlier, Huberman’s career cycle framework also guided this present research. The original purpose of Huberman’s (1989) theory is to enhance the understanding of teachers’ professional lives through a systematic framework, organising their professional development plans and how they continually evolve; this includes how they assess their roles in the classroom, their effectiveness as educators and the steps they take in developing their career (Huberman, 1989). Huberman’s study attempts to predict later phases of teaching from earlier ones, anticipating types of beginnings that led to career crisis. He defined the three major phases in a teacher’s life cycle, as: 1) novice, 2) mid-career, and 3) late-career, to which accordingly in each of these three main phases are crucial sub-phases of Discovery, Stabilization, Experimentation, Reassessment, Serenity and Conservation, and Disengagement. Each career stage is thought to be a crucial period in the teacher lifecycle, comparable to lifecycle stages of an individual i.e. infancy, toddler, pre-schooler, and so on.

Huberman (1989) divided teaching careers into stages, depicted by years in the field: 1-3 years, 4-6 years, 7-18 years, 19-30 years, and 31-40 years of teaching service. He asked the teachers to reflect on their career trajectories, identify distinct phases, and attach original thematic titles to each. Data were then matched to three teacher career phases. The initial phase defined types of beginnings, the second phase is of stabilization, followed by the final, in which affirmation or emancipation from teaching occurs. The professional life cycles of teachers are not always, linear and Huberman (1989) stresses that the lines are sometimes unclear between the phases of a career and that a teacher may leap from one stage to another.

**3.3.4** **Bronfenbrenner’s ecological systems theory**

This theoretical framework was chosen for this study to embody the environmental impacts that depict the intricacy of university academics’ everyday experiences of burnout in a more organised manner. Bronfenbrenner identified five main environmental systems with which a person interacts and how one’s development is affected by the surrounding ecological structures (Bronfenbrenner, 1979).



**Neighbourhood**

**Institution**

**Education system**

**Political system**

**Government system**

**Economic system**

**Dimensions of Tine**

**Overarching belief and values**

Figure 1. Bronfenbrenner's ecological systems theory for Malaysian university academics. (Adopted from Bronfenbrenner, 1979)

***3.3.4.1 Environmental influences on academics’ burnout and well-being***

Inthe microsystem, the first layer refers specifically to the individual (i.e. academic) and their relationship with the direct environment, meaning family members, the workplace (university), students, and other factors that influence them. Upon entering the workplace, academics embark on a progressing journey through various exchanges in the novel surroundings. These evolving exchanges between the academic and their surroundings (the microsystem) are influenced by insights, abilities, and how they manage these interactions (Bronfenbrenner, 1979). The second layer, the mesosystem level, are now those connections and interactions between the individual microsystems (that is the family system, the university system, peers, wider social support groups, etc.) and how these individual connections impact the academic. Next, is the exosystem level, or indirect environment, in which academics are absent, that involves the local organisational unit and contextual influences where academics are working. The macrosystem level encompassing arrangement and societal views, morals and legislative influences have increasingly varying effects and impacts on an academic’s well-being. In addition, the timing of events, choices, and actions (chronosystem) also influences academics’ well-being and burnout state. Hence, it becomes an interplay between the academic’s behaviour influencing the environment and, in return, the environment influencing the academic’s behaviour as well.

The structured organisation of Bronfenbrenner’s model was used as a framework to examine university academics’ perceived burnout levels due to it providing a lens to identify academic perceptions of key themes of the environmental interconnectedness with academics’ burnout levels.

## 3.4 Summary

It would be beneficial to explore burnout from a perspective other than that of a Western viewpoint, as most existing studies in this area are conducted in Western cultures. This does raise the question of whether burnout and work engagement may be comprehended differently in cultures where the university environment is different, such as in the case of Malaysia, a developing nation and belonging to a collectivistic society and cultural background. This type of study could offer further insights about the nature of burnout and the role of context in building engaged and resilient academics. Additionally, the association between the level of work engagement, occupational burnout, and resilience of academics with varying work experience in Malaysian universities has yet to be explored with well-validated instruments.

Other than aiming to offer readers with a clearer understanding of the factors contributing to the levels burnout of academics working in higher learning intuitions of Malaysia, so a model of resilience that reduces the potential for burnout occurrences can begin to evolve; this study also provides insight into how academics cope and what mechanisms they utilise to counter pressures at work from an academic environment perspective.

The longitudinal nature of the study is hoped to unveil in-depth information about academics personal experiences in regards to work engagement and burnout. This research should give valuable information on what aspects make an academic resilient and determine the factors associated with burnout and engagement in relation to the different career stages the academics are in. As no previous study has attempted to investigate these factors combined in a sample of university academics, moreover in a longitudinal manner, the full and thorough description of their experience, thoughts, and feelings to be considered adds strength to this study. The literature presented above has presented in regard to the nature of burnout, factors that contribute to its development, and the possible consequences for those individuals affected. Various literature on the role of work engagement and resilience was also discussed, in addition to analysing the precise association engagement and resilience have with burnout, and looked at career stages, as well as the theoretical frameworks relevant for this study. A number of hypotheses have also been developed based on the literature. The main objective of this research is to examine and ascertain what factors contribute to Malaysian university academics becoming burned out, what influences them to remain engaged and, in addition, to explore the related factors contributing to this relationship i.e. resilience. Therefore, the overall key research questions of this study are designed to address the relationship between work engagement, burnout, and resilience among Malaysian university academics.

The contributions towards practice this present study is expected to offer are as follows:

1. Knowledge gained from this study will raise awareness in individuals whose careers are within the spectrum of higher learning in that issues, for instance pertaining to personal burnout, how to become resilient on the job, and work engagement, will be enlightened.
2. Results and findings from this study will also benefit those in the Education and Manpower Bureau to design burnout training programmes to serve mainstream university academics and aspiring educators and, in addition, raise the awareness of Malaysian university management in regards to academics’ sources of burnout and how to address such matters accordingly.
3. Moreover, the literature also has the potential to reveal implications for higher learning institutions, for bosses, academics themselves, so that academics become and remain healthy, confident, and efficient working professionals**.**

**Chapter Four: Research Methodology**

## 4.1 Introduction

The study utilises both qualitative and quantitative strategies to identify the influences of career stages on the occurrences of burnout, engagement, and resilience in Malaysian university academics. A two-stage mixed methods approach involving a combination of survey research and semi-structured interviews was undertaken. In Phase 1, a questionnaire was used to explore the relationship of occupational burnout, engagement, and resilience among university academics, whilst for Phase 2, longitudinal qualitative research in the form of in-depth interviews was conducted to probe into participants’ experience working as academics and to capture any changes in their burnout, engagement, and resilience levels over time. Quantitative data were collected through means of an online survey tool, whereby qualitative data was derived from transcripts of the interviews. The nature of this study lent itself to both quantitative as well as qualitative design rather than just focusing on one particular approach.

### 4.1.1 Research design

### This present study utilised a two-stage mixed method research design that includes: (1) main numerical data collected by means of surveys (quantitative) in addition to, (2) longitudinal qualitative research method collected by means of in-depth semi-structured interviews (qualitative), as only one data source may be inadequate. The researcher followed Creswell and Plano Clark who argued that ‘mixed methods research helps answer questions that cannot be answered by qualitative or quantitative approaches alone’ (2011, p. 12). As burnout has been scrutinised expansively for the last thirty years, and as several standardised assessment measures exist, the quantitative approach was chosen as the principal approach.

For the qualitative approach, in-depth interviews were selected since they enable the exploration of participant experiences in greater depth than allowed by other methods (e.g., focus groups). Because the researcher is interested in each academic’s individual journey over a semester, and because the aim is to capture changes of the academics’ three quadrants (burnout, engagement and resilience levels) over time, a longitudinal qualitative research design (LQR) was used. LQR has been an emerging methodology (Thomson, Plumridge, & Holland, 2003). It is distinguished from other qualitative approaches by the way in which time is incorporated within the research process, making change a crucial focus for analysis (Thomson et al., 2003). LQR answers qualitative questions in regards to the lived experience of change and even stability, over time (Thomson et al., 2003). Findings can establish the processes by which this experience is created and illustrate the causes and consequences of change (Calman, Brunton, & Molassiotis, 2013). For instance, for this particular study, qualitative research is about why and how academics experience burnout, work engagement, resilience and LQR emphasises how and why such experiences change across time. LQR emphasises the accounts and trajectories of the individuals, and attains the essential processes and moments involved in change (Calman et al., 2013).

Other than LQR, phenomenology was also utilised to aid in understanding the meanings university academics ascribe to their burnout experiences at work and how engagement and resilience have played a role in their daily routine.

### 4.1.2 Phenomenology

### Phenomenology is an approach relating to the phenomenon itself or lived reality as it appears (Ashworth, 2003). Accordingly, to explore a specific given occurrence or phenomenon, this approach focuses on gaining first hand accounts of an individual’s experiences of the particular phenomenon and offers a direct view allowing the sharing of particular events in his or her world, rather than outside of that world (Creswell, 1995). Phenomenology typically centers on what individuals experiences and the contexts of situations in which they experienced it (Moustakas, 1994).

### 

### 4.1.3 Justifications in selecting phenomenology

### The researcher selected phenomenology within qualitative research to gain knowledge of the participants’ experience of a phenomenon, due to this qualitative approach seeming more suitable as the focus is on the individuals’ subjective lived experiences. Although constructivist grounded theory was also a type of research considered for this research study, phenomenology was chosen because it studies the individuals’ conceptions of reality, or the reality as it appears to the individuals. Through using the phenomenological study, the researcher obtained insights into participants’ perceptions of their situations and studied those who experienced burnout and how it impacted their careers, etc. In the phenomenological study, the participants interviewed were in a small number to provide a broader range of opinions and deeper insight into the phenomenon.

### 

### 4.1.4 Integration of the quantitative and qualitative approaches

### Creswell (2009) describes the concept of integrating the quantitative and qualitative approaches for five main purposes, which are:

### 1. To seek triangulation through the emergence of the results

### 2. To search for different aspects of the phenomenon under study

### 3. To structure the methods in such a manner (sequential) so the first method may

### explain/help inform that of the second method

4. To ascertain or discover any relevant ambiguities and

5. To expand and broaden the scope of the particular issue under investigation.

To explore the factors associated with work engagement, burnout, and resilience, this study used what Creswell (2009) calls a ‘sequential explanatory mixed methods design’ (Figure 2) to help explain the quantitative analysis results. In the first phase, quantitative findings were acquired from an analysis of a cross-sectional study (n = 681). In the second study phase, twelve individual interviews with selected participants were conducted at three-time points (T1, T2, and T3) to help explain the quantitative results. The survey questions were close-ended. The subsequent in-depth, semi-structured interview comprised of individualised questions aimed to explore any survey responses which were interesting or somewhat ambiguous, on top of questions examining participants’ experiences in the occurrences of burnout, their experiences of work engagement, and significant changes to their levels of burnout over the course of one semester.

QUANTITATIVE

Data collection

QUANTITATIVE

Data analysis

QUANTITATIVE

Data results

Phase I

QUALITATIVE

Data collection

QUALITATIVE

Data analysis

Overall findings and interpretation

Phase II

Ask questions to explain QUANTITATIVE results

**Procedures:**

Cross sectional study (n=681)

Structured questionnaire.

**Procedures:**

Descriptive statistics, bivariate correlations, structural equation modelling (SEM) techniques.

**Procedures:**

Identification of statistically significant associations.

**Procedures:**

Explain Quantitative with Qualitative results.

**Product:**

Table of participants’ commentaries, stories, experiences.

**Procedures:**

Phenomenological-hermeneutic approach:

Naive reading,

Structural analysis,

Critical interpretation.

**Procedures:**

In-depth interviews (n=12)

(Time point 1, Time point 2, and Time point 3. (Longitudinal Qualitative Research)

Phenomenological research

**Procedures:**

Add questions to questioning route following the quantitative results.

Figure 2. Process flow diagram of the procedures for this sequential explanatory mixed methods study.

For the quantitative data, a series of measures were administered to participants in order to determine the relationship between burnout, engagement, and resilience. Such measures include the emotional exhaustion subscale of the Maslach Burnout Inventory-Educators Survey (MBI-ES), the Engaged Teachers Scale (ETS), the 14-Item Resilience Scale (RS-14), the workload subscale of the Areas of Work life Scale (AWS), and also the Pressure to Publish scale. Structural equation modelling (SEM) was used to test the theory and analyse the relationships among the variables. The research questions to be investigated in Phase 1 (quantitative aspect) of the study are:

• What is the relationship between burnout, engagement, and resilience of university academics? And;

• What is the extent to which university academics differ in their burnout levels in regards to career stages?

Hence, in Phase 1, what is derived from the survey is expected to yield an unbiased result that can be generalised to the larger population.

The Phase 2 (qualitative stage) comprised of in-depth interviews with burned out as well as engaged individuals from Phase 1 in order to obtain detailed narratives about the experience of burning out and being engaged from Malaysian university academics. Each individual’s unique burnout and engaged experience was examined and content analyses were used to identify patterns and changes experienced across individuals. This phase was also intended to gather a detailed and accurate picture of how academics experience engagement and resilience as a means of informing the numbers attained from the surveys in Phase 1. In other words, whereas results of Phase 1 of the study yielded numerical data in regards to a given phenomenon under study i.e. the scenario of burnout, engagement, and resilience among university academics, Phase 2 defines how these experiences actually do occur and how they are experienced by the academics individually. In addition, during this second phase, changes to their levels of burnout, engagement, and resilience across time were explored.

This qualitative aspect is a process of adding depth and understanding to the study. By incorporating the qualitative aspect into the study, a more complete picture as compared to adopting a single mode of data collection strategy alone is thus available (Creswell, 2009). Phase 2 sought to answer the following questions:

• What are the identified changes of burnout, engagement, and resilience across a 14-week period among university academics?

• What factors do university academics identify as influencing their burnout, engagement, and resilience levels?

In summary, the data gained from questionnaires was analysed quantitatively (681 returned usable surveys) while data from interviews was analysed qualitatively (12 X 3 (time-points) semi-structured interviews). Both results are then combined, seeking ‘to obtain different but complementary data on the same topic to best understand the research problem’ (Creswell & Plano Clark, 2011, p. 77).

While undoubtedly there will be tensions between the two approaches adopted in the survey and interview elements of the study (i.e. interpretative phenomenological analysis and null hypothesis significance testing) due to their individual strengths and benefits, this matter was nevertheless recognised and indentified beforehand.

**4.1.5 Hypotheses of the study**

One of the objectives of this study was to test a conceptual model that defines selected essential factors that are related (and ultimately may be causative) to burnout in Malaysian university academics. This study incorporated three main variables: burnout, engagement, and resilience. Specifically, the model incorporates a) burnout, which focuses on emotional exhaustion (a component of professional burnout) that is, a state of chronic physical and emotional exhaustion owing to relentless stress and extreme job and personal demands (Maslach & Jackson, 1981); b) two categories of environmental factor inductors (workload and Pressure to Publish) and one career-related variable (years of experience) which are all predicted to have a significant influence, either directly or indirectly, on the onset of burnout among university academics; c) work engagement, believed to be the opposite experience of burnout, and finally; d) resilience, considered a personal resource facilitating higher levels of engagement and having a link with burnout; e) burnout, playing the role of mediator in the relationship between resilience and work engagement (see Figure 3).

It is expected that burnout will be directly linked to work engagement in that university academics’ high feelings of emotional exhaustion will result in lower levels of engagement. It is therefore postulated that engagement and burnout are negatively related and this will serve as the first hypothesis of the study.

***Hypothesis 1 (H1)*.** Burnout will be negatively correlated with engagement, meaning academics who experience a high level of burnout will report lower levels of engagement (Hyvonen et al., 2009).

Hence, for this present study, two of these identified pressures faced within the academe that instigate burnout among academics i.e. Pressure to Publish and workload, were further investigated. It is therefore hypothesised that academics who perceive these environmental sources (i.e. workload and Pressure to Publish) as more stressful would report more burnout symptoms; hence the second and third hypothesis are:

***Hypothesis 2 (H2).*** Pressure to Publish is positively related to burnout (Tijdink, Vergouwen, & Smulders, 2013).

***Hypothesis 3 (H3).*** Workload is positively related to burnout (Doyle & Hind, 1998).

Following the theory that resilience is considered a personal resource that may facilitate higher levels of work engagement, and shown to have a link with burnout (Dyrbye et al., 2010), Therefore the third hypothesis of this study posits that:

***Hypothesis 4 (H4a).*** Academics’ levels of burnout have a negative relationship with their resiliency levels (Dyrbye et al., 2010).

***Hypothesis 4 (H4b).*** Academics’ levels of resilience have a positive relationship with their engagement levels. (Dyrbye et al., 2010).

***Hypothesis 4 (H4c).*** Academics’ levels of resilience have a positive relationship with work engagement. Academics with high levels of resilience will also have high levels of engagement towards their work. Resilience is related to work engagement through burnout. In other words, burnout partly mediates the relationship between resilience and work engagement. (Dyrbye et al., 2010).

Therefore, the last hypotheses of the study are in relation to years of experience with burnout, engagement, Pressure to Publish and resilience:

***Hypothesis 5a (H5a).*** Years of experience are positively correlated with work engagement; that is, the more years of experience an academic has, the more he/she will express work engagement (Hoole & Bonnema, 2015)

***Hypothesis 5b (H5b).*** Years of experience are negatively correlated with burnout; that is, the more years of experience an academic has, the less he/she will express symptoms of burnout (Kokkinos, 2007).

***Hypothesis 5 (H5c).*** Years of experience are negatively correlated with pressure to publish; that is, the more experiences an academic has, the less likely he/she will report feelings of Pressure to Publish (Tian, Su, & Ru, 2016).

***Hypothesis 5d (H5d).*** Years of experience are positively correlated with resilience; that is, the more years of experience an academic has, the more likely he/she will express resiliency (Grant & Kinman, 2013).

To reiterate, for this study the researcher examined the following hypotheses respectively:

Table 4.1. Summary of hypotheses

|  |  |
| --- | --- |
| No | Hypothesis |
| H1 | Burnout is negatively correlated with engagement; academics who experience a high level of burnout will report lower levels of engagement. |
| H2 | There is a positive relationship between academics’ levels of burnout with perceived feelings of Pressure to Publish. |
| H3 | Workload is positively correlated with burnout; academics who experience a high level of perceived workload will report higher levels of burnout. |
| H4a | Academics’ levels of burnout have a negative relationship with their resiliency levels. |
| H4b | Academics’ levels of resilience have a positive relationship with their engagement levels. |
| H4c | Resilience is related to work engagement through burnout. In other words, burnout partly mediates the relationship between resilience and work engagement. |
| H5a | Years of experience are positively correlated with work engagement; that is, the more years of experience an academic has, the more he/she will express work engagement. |
| H5b | Years of experience are negatively correlated with burnout; whereby the more years of experience an academic has, the less likely he/she will report feelings of burning out. |
| H5c | Years of experience are negatively correlated with Pressure to Publish; that is, the more experiences an academic has, the less likely he/she will report feelings of Pressure to Publish. |
| H5d | Years of experience are positively correlated with resilience; that is, the more years of experience an academic has, the more likely he/she will express resiliency. |

H3

H2

H1

H4b/H4c

H5d

H5c

Years of Experience

H4a

H5a

H5b

Figure 3. Hypothesised model of resilience and burnout-engagement

### 

### 4.1.6 The present model

### In the current investigation, the researcher concentrated on the direct and indirect relationship between burnout, work engagement, and resilience among academics in Malaysian universities. It is predicted that burnout and engagement will have a direct and negative association whereby it is assumed that academics who experience a high level of burnout will report lower levels of engagement. In addition to this, two relevant aspects of their working environment or work features were also included in the relationship framework, namely workload and Pressure to Publish. Earlier studies with the Job Demands-Resources (JD-R) model (e.g. Demerouti, Peeters, & Van der Heijden, 2012; Rothmann & Jordaan, 2006; Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2007) have compellingly shown that each of these working environment characteristics (i.e. workload and Pressure to Publish) may have a significant impact on burnout. Here, the basic principle of the JD-R model is that job resources is a crucial element that moderates the potential negative effects of job stress, in general jobs characterised by high demands (i.e. work overload and time pressure). On the basis of this model, it is postulated that both workload and Pressure to Publish will show a direct relationship with academics’ burnout. In other words, the higher the workload, the higher the chances for an academic to express burnout. The same goes with Pressure to Publish. More specifically, both workload and Pressure to Publish are hypothesised as positively related to burnout. Along the same lines, it is expected that the prevalence of burnout (as a result of high workload and Pressure to Publish) among academics may explain the negative correlation with engagement; academics who experience a high level of burnout will report lower levels of engagement and (a lack of) resilience in the working environment will sever this relationship even more.

Here burnout serves as a mediator and work engagement is expected to increase as resilience levels are met with the intervening mediator in the form of burnout. To explain further, among academics who experience a high level of burnout, for them to continue reporting high levels of engagement towards work, the proper dose or optimal levels of resilience are needed. On the contrary, academics reporting a low level (lack) of burnout on the job, with an ideal level of resilience, are predicted to be further engaged in their work.

In terms of years of experience or career stages, it is presumed that specifically one’s years of experience and career stages could buffer the individual from the potentially damaging effects of burnout; that is, the higher the career stage an academic is in, the less likely they are to report burnout symptoms or the more experience on the job an academic has, the lower the possibility he/or she will show burnout symptoms. Years of experience are hypothesised to be negatively linked with burnout.

**4.1.7 The Role of the Researcher**

**4.1.7.1 Avoiding insider bias**

According to Saidin and Yaacob (2016), being an inside researcher may aid in further understanding the research undertaken and the phenomena being studied. But for some, becoming an insider researcher may lead to a loss of objectivity and bias (Saidin & Yaacob, 2016). Being highly aware of this issue, caution was given high importance, especially during the second qualitative wave where the researcher was concerned with being prejudiced or overly sympathetic to respondents’ statements and experiences of burnout. Henceforth, caution was continually taken in trying to create and build distance from those interviewed, as recommended by Greene (2014).

## 4.2 Stage 1 (Quantitative Phase)

**4.2.1** Participants

The sample was drawn to represent academics in different departments of the selected universities and the various academic post levels. All participants were described the purpose of the study and were promised anonymity. As the potential population size for this study is 50,000 (Ministry of Higher Education Malaysia Website), Krejcie and Morgan’s (1970) table for determining the sample size was used to justify the sample size. Here, the sampling frame would be public and private higher education academic staff, respectively. Accordingly, in order for the sample to be appropriately represented, Krejcie and Morgan (1970) suggest that for a population of 50,000 the minimum requirement for the sample size is = 381 (see Appendix A for more information).With reference to Krejcie and Morgan’s (1970) table, the present researcher opted to accumulate 75 respondents from each of the selected universities (75 X 8 = 600) to fulfil the required sample size. Universities in this study were chosen as a basis of wanting to include the various types of existing universities in Malaysia, by selecting an equal number of public universities and private universitites. Hence, four public universities (two of each being research universities and two non-research universities) as well as four private universities. The total of 600 would hence fulfil the required minimum sample size of 381.

Table 4.2. Proposed total sample size

|  |  |
| --- | --- |
| University Type | Total Sample Size Selected for Study |
| University A (Public, Research University) | 75 |
| University B (Public, Research University)  University C (Public, Non-Research University)  University D (Public, Non-Research University) | 75  75  75 |
| University E (Private University) | 75 |
| University F (Private University) | 75 |
| University G (Private University) | 75 |
| University H (Private University) | 75 |
| TOTAL | **600** |

Additionally, Hair, Anderson, Tatham, and Black (1998) state that for a typical study the sample size ought not to be less than fifty and that the preferable sample size is one hundred or more. If using structural equation modelling (SEM) for the data analysis, the authors recommend a sample size of one hundred to two hundred, but contend that two hundred or more is the “critical sample size”. This is exceptional in cases of abnormally large or complex models.

### 4.2.2 Procedure

### Phase 1 involved distributing the online survey to the academics in a sample of eight higher learning institutions in Malaysia. An email were sent to respondents directing them to the Web-based questionnaire (link). This was to reduce the need for any additional actions on behalf of the respondents. The list of scales involved in this study are listed below. Demographic data were obtained from the participants. In this phase, to examine the hypotheses, a correlational research design based on the survey data was used. In this phase too, respondents were asked their willingness to participate in an interview, if selected. Individuals who answered in the affirmative and who fulfilled the needed criteria were later contacted for the second half of the study. From this pool, respondents depicting results indicative of burnout were selected for the next Phase 2 of the study.

To determine the appropriateness of the survey prior to the actual study a pilot study was conducted to distribute the devised questionnaire to 100 university academics. In Hertzog’s (2008) comprehensive article in regards to sample size for pilot studies, for a feasibility study, “samples as small as 10-15 per group sometimes being sufficient” (p. 190). As such, the researcher opted to include 100 academics for the pilot research. See section 3.5 for more detail on the pilot study.

**4.2.3 Measurement**

In forming the questionnaire for this study, five existing instruments were adapted 1) the Maslach Burnout Inventory-Educators Survey, 2) the Engaged Teachers Scale, 3) the 14-Item Resilience Scale, 4) the workload subscale of the Areas of Work life Scale, and 5) a Pressure to Publish scale indicating a total of 56 items for the pilot study. The measuring instrument comprised of five main parts as follows:

***Section I – Engagement.*** Klassen, Yerdelen, and Durksen’s (2013) Engaged Teachers Scale (ETS) was used to measure the engagement of the academics. The ETS consists of four dimensions which are emotional engagement, cognitive engagement, social engagement: colleagues and social engagement: students (Klassen et al., 2013). The ETS contains 16-items with items scored from 0 (never) to 6 (always). The ETS is shown to be a highly reliable instrument with good construct validity, practicality, and is reliable for use in education settings (Yerdelen, Durksen, & Klassen, 2018).

***Section II – Emotional Exhaustion***

Emotional exhaustion occurs when an individual feels completely exhausted, drained, and loses control of his or her emotions (Maslach & Jackson, 1981). In this study, burnout was measured by the emotional exhaustion subscale (9 items) of the Maslach Burnout Inventory-Educators Survey (MBI-ES), addressed in questions 1, 2, 3, 6, 8, 13, 14, 16, and 20. Each item was rated from 0 (never) to 6 (every day) by indicating the degree to which a person experiences different job-related feelings. The reliability and validity of the MBI has been demonstrated in a number of studies (Jackson, Turner, & Brief, 1987; Maslach & Jackson, 1981; Sethi, Barrier, & King, 1999; Yashwant Advani, Jagdale, Kumar Garg, & Kumar, 2005).

***Section III – Resilience***

Dispositional Resilience was assessed by the 14-Item Resilience Scale (RS-14) (Wagnild, 2016). Consisting of 14 items, ranging from strongly disagree = 1 to strongly agree = 7, the total scores range from lowest score = 14 until highest score = 98. Scores of more than 90 indicates an individual has a high degree of resilience, 61 to 89 indicating moderately low to moderate levels of resilience, and 60 and lower indicating low resilience. The RS-14 has been found to show good reliability and validity and has been well established in various populations including older adults (Resnick & Inguito, 2011).

***Section IV – Workload***

In order to assess workload, the workload subscale of the Areas of Work life (AWS, Leiter & Maslach, 1999) was used. This subscale consists of five items and includes positively and negatively worded items, where all items are phrased as statements of perceived agreement or disagreement of an individual towards his/her workload. Subjects are expected to indicate their answers on a 5-point Likert-scale (1 = strongly disagree to 5 = strongly agree). A high score indicates a high degree of perceived workload of an individual. On the contrary, low scores on the AWS subscales (less than 3) denote the presence of risk factors for the development of burnout in the workplace.The scoring for the negatively worded items is reversed.

***Section V - Pressure to Publish***

Pressure to Publish was gauged by twelve items taken from the Academic Publishing Survey developed by Miller, Taylor, and Bedeian (2011). Items were scored using a five-point Likert scale (1 = strongly disagree; 5 = strongly agree).

### 4.2.4 Data analysis

### In the quantitative analysis, for the initial data screening, descriptive statistics and bivariate correlations were calculated. In order to test all five (including sub hypotheses) hypotheses simultaneously, structural equation modelling (SEM) techniques were employed using the Mplus software package version 7.3 to test the fit of the research model.

## 4.3 Stage 2 (Qualitative Phase)

### 4.3.1 Participants

### Phenomenological studies generally involve very small groups of participants (Smith & Osborn, 2003). Smith and Osborn (2003) also contend that the distinctive feature of phenomenology is the commitment to a comprehensive interpretation of the cases. Hence, this can only be possible with a very small sample. The aim is to allow the chance to obtain an in depth account of the perceptions of the group, instead of inferring general statements (Smith & Osborn, 2003).

Accordingly, for phenomenology, the typical sample sizes range from 1 to 10 individuals (Starks & Brown, 2007) whilst Creswell (1998) recommends using between five to 25 people for interviews so the researcher can deliberately choose participants who create a deep understanding of the phenomenon. Alternatively, five or six has been suggested as a reasonable sample size as the meticulous analysis of cases is expected (Smith & Osborn, 2003). Saturation was also used in this present study as a guiding principle during the data collection process, which refers to the process of diminishing return as data saturation and a signal that the data collection process is now complete or near completion (DiCicco-Bloom & Crabtree, 2006). As a result of suggestions in the literature, for this study, twelve (12) participants were selected to participate in the in-depth interviews. Participants were selected so as to portray diversity and are adequate enough to add richness to the data. As stated by Cohen, Kahn, and Steeves (2000) random sampling is inappropriate for phenomenological studies due to phenomenology relying more heavily on chosen participants for the purposes of gaining in-depth information.

The 12 selected academics came from the pool of academics in Phase 1 who previously completed the MBI-ES and had voluntarily agreed to take part in the interviews. Of these 12 participants, four (n = 4) were selected due to attaining relatively low scores on the burnout subscale, two (n = 2) participants were chosen for getting an average score of burnout and six (n = 6) participants were selected based on attaining high scores on the burnout subscale, suggesting the experience of substantial burnout (Cresswell & Eklund, 2006). The selection, with a higher number of those in the High burnout cohort than in the Average and Low cohort was deliberate, so as to give added focus to those academics who have undergone a series of burnout in their career compared to those who are less burned out or in the middle form of burnout. This too was in line with fulfilling the main objective of this study i.e. exploring the factors Malaysian academics identify as influencing their burnout, hence aspiring to know more of what this particular cohort could reveal. However, this does not imply that those in the lower and average groups have less significance in this study, as these clusters usually highlight those individuals from the opposite ends of the continuum i.e. academics with higher job engagement, resilience, etc., and therefore act as comparisons for academics in the High burnout groups. This explains the unbalanced sample for this study. The tables below illustrate participant demographics and, importantly, their respective burnout groups.

Table 4.3. Demographic details of participants in the Low degree of burnout group

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Code | Years  in academia | Current academic post | Discipline/Field | Institution type | Age | Gender  & Marital status | Burnout score |
| L1 | 5 | Lecturer | Sciences | Public University | 32 | Female | 0 |
| L2 | 4 | Lecturer | Social Sciences | Public University | 28 | Male, Single | 6 |
| L3 | 2 | Lecturer | Social Sciences | Public University | 33 | Female, Single | 14 |
| L4 | 15 | University Teacher | Social Sciences | Private University | 46 | Male, Married | 9 |

Table 4.4. Demographic details of participants in the Medium/average degree of burnout group

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Code | Years  in academia | Current academic post | Discipline/Field | Institution type | Age | Gender  & Marital status | Burnout score |
| M1 | 5 | Lecturer | Social Sciences | Private University | 30 | Female, Single | 21 |
| M2 | 9 | Assistant Professor | Sciences | Public University | 36 | Female, Married | 18 |

Table 4.5. Demographic details of participants in the High degree of burnout group

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Code | Years  in academia | Current academic post | Discipline/Field | Institution type | Age | Gender  & Marital status | Burnout score |
| H1 | >12 | Senior Lecturer | Sciences | Public University | 41 | Female, Married | 48 |
| H2 | 4 | Lecturer | Social Sciences | Private University | 42 | Female, Married | 28 |
| H3 | 7 | Senior Lecturer | Sciences | Public University | 35 | Male, Married | 30 |
| H4 | 3 | Senior Lecturer | Sciences | Public University | 35 | Female, Single | 43 |
| H5 | <4 | Lecturer | Social Sciences | Private University | 28 | Female, Married | 43 |
| H6 | >18 | Senior Lecturer | Sciences | Public University | 40 | Female, Married | 27 |

**4.3.2 Procedure and conducting the interview**

In this qualitative stage, burnout was examined by measuring any changes experienced by the subsample (n = 12) of academics over time. In-depth interviews were conducted at three separate time points (T1, T2, and T3) through the course of one semester. The aim is to come up with a full account of their stories from the three different time points so as to understand the occurrences and trajectories of burnout and engagement at 4 – 6 weeks from the start of the semester (T1), during the middle of the semester (week 9) (T2), and again at 12 – 14 weeks towards the end of the semester (T3) (with a one month gap between each time point). While there were no guidelines on how long a qualitative longitudinal study ought to be, at least two points are necessary to examine change (Saldana, 2003). Current research on burnout in education has enriched the knowledge with regard to the burnout dimensions as well as what actually influences this (Dorman, 2003; Skaalvik & Skaalvik, 2009), yet, not much has focused on how and by what means burnout develops among academics, an area in which this qualitative piece is quite crucial.

All interviews (T1, T2, and T3) were carried out individually. Arrangements to meet participants in terms of the time, date and place were made via telephone. For the first (T1) and second interview (T2) this was conducted face to face, as suggested by Shuy (2002) to facilitate naturalness and establish rapport. Whilst at the last stage interviews were conducted electronically via email where questions were sent to respective participants and they responded and emailing the answers back to the researcher. Email interviews were chosen for the last stage to accommodate the respondents and encourage them to commit to the last interview.

Each interview (T1 and T2) lasted approximately 60 to 90 minutes, with one specific participant (H1) taking more than 90 minutes.. In regards to building rapport, other than having made initial contact with academics in the opening email (i.e. inviting them to take part in the study), small talk and empathy were used to make them feel comfortable throughout their interviews.

***First interview (Time point 1, T1; beginning of semester 4th - 6th week)***

For the first interview, academics’ experiences on the job were investigated and clarified in depth. The other goal of this initial interview was also to clarify whether previous findings attained from the questionnaires (from the first phase of the study) reflected their actual viewpoints. At the start, academics were asked to describe their academic career and soon after, detailed open-ended questions i.e. relating to the phenomenon of burnout, their experience of burnout (if any), their levels of engagement towards work, the current university environment they work in, their burnout and engagement levels at that point of time and how they made use of resilience in combating burnout and so on, were discussed.

At Time point 1, interviews began with open-ended questions in which respondents were encouraged to freely narrate their daily work duties. Warm-up questions were also employed allowing participants to feel relaxed and at ease during this initial stage and become more comfortable in describing their professional work experience prior to starting the actual interview. Warm-up questions included:

* Tell me about your personal history and experience with regard to becoming and being an academic.

Participants were also asked to share stories or “critical incidents” (Denzin & Lincoln, 2000), for example: “Describe a particular situation(s) or event(s) representative of your experiences of occupational burnout” or “Briefly outline the circumstances and context involving burnout”, “What happened to you, and how did this explain your response to burnout?”

***Second interview (Time point 2, T2; middle of semester (week 9***)

In the second interview wave, the format was slightly different than the first interview, insofar as it drew heavily on what had already been discussed. This second interview was mainly aimed at capturing the changing nature of the academics’ experiences from Time point 1 and took much less time as compared to the previous interview, i.e. only 20 minutes to half an hour. Following initial open-ended discussions about what they recalled from the previous interview wave, respondents were also asked to report on any changing patterns of burnout or engagement (if any) that they encountered from the time of the initial interview and whether there were any significant changes to these aspects (i.e. any increase, decrease, consistency) (Saldana, 2003). They were also encouraged to narrate any positive or negative changes that they may have undergone. The following questions were also asked in order to identify any variations as suggested by Saldana (2003):

* Has there been any increase/decrease in your levels of burnout/work engagement/resilience since the last interview? Describe.
* Of the three components (burnout/work engagement/resilience), what has remained constant or consistent throughout your experience? Describe.

***Third interview (Time point 3, T3; end of semester 12th – 14th week)***

In the third interview, similar to the second wave, respondents were probed to describe and report on whether there were any changes to their levels of burnout and engagement during that specific time point. Any changing patterns that were developed during the first initial interview through Time point 3 were noted by having them narrate of any positive or negative changes of their experiences.

A guide was used to navigate the whole course of the interview and to ensure coverage of the key topics and themes (see Appendix C). Questions were also guided by suggestions given by Smith and Osborn (2003) as well as Everly, McCormick, and Strouse (2012) on how to conduct a semi-structured interview based on interpretative phenomenological analysis. In regards to the interviews and how they were conducted, questions were asked in relation to participants’ experiences, views, and feelings (with the theme in mind) as suggested by Groenewald (2004). All interviews were carried out between January of 2017 and April of 2017.

**4.3.3 Data analysis and interpretation**

Muhr (1991) recommended using ATLAS.ti to manage and facilitate the process of analysing qualitative data, due to it being able to handle data records, coding, and having the capacity to deal with large amounts of text. Accordingly, ATLAS.ti version 7 (<http://www.atlasti.com/>) was used for the data management of this study. A total of 36 interview transcripts were entered into ATLAS.ti. However, for the coding and analysis of transcript content, manual techniques were used.

Phenomenological research seeks to explore what participants are experiencing which is unclear to others (Laverty, 2003) and to focus on the building blocks of experiences. This method is inspired by Ricoeur’s (1976) viewpoint. The primary goal of this method is to understand, clarify, and comprehend the meanings of an occurrence, specifically being burned out (Ricoeur, 2008). The interpretation of the interview text consisted of a two-way exchange, i.e. understanding the text as a whole and clarifying bits and pieces of the text. To fully comprehend the text in relation to its possible setting, field notes were utilised to note nonverbal gestures, pauses, and interruptions. Interviews were then transcribed verbatim.

***4.3.3.1 Transcription***

The raw data gained from the interviews were in tape-recorded form. To begin, interviews were transcribed verbatim. This is because analysis and interpretation of such data rests on the sufficiency of a carefully prepared manuscript (Mischler, 1986). Texts were read and validated against the audio recordings. After the interviews were transcribed and finalised, the information was again revised to gain a better comprehension of the background surrounding the participants’ experiences.

***4.3.3.2 Naive reading (Familiarization)***

During the naive reading, familiarization with the data was done by reading the data and listening to the tapes all over again. Those passages of the text deemed as having a link to the research questions were highlighted as initial codes. Pieces of the text that were relevant to the topic under study were extracted and brought together into one text (unit of analysis). This naive understanding of the interview text was written down and constituted a basis for the structural analysis stage (Lindseth & Norberg, 2004).

***Coding***

From this naive reading stage, preliminary codes were looked through and any new codes were observed with the purpose of relating them to the research questions.

***4.3.3.3 Structural analysis***

In this stage, parts of the interview text were clarified and validated or invalidated. First, the interview text was split into units of meaning (words, sentences, or fragments of text) that convey meaning (Lindseth & Norberg, 2004). The analysis then continued by linking meaning units with similar content together (Lindseth & Norberg, 2004). The meaning content of the meaning units was then summarised to form ‘Condensed Meaning Units’. After distinguishing and assorting the meaning units, meaningful connections were constructed, later theorised and classified into sub-themes and themes (Lindseth & Norberg, 2004). See Table 4.6 below.

Table 4.6. Example of the coding process of interpretation from meaning units to condensed meaning units to subthemes and themes

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Participant** | **Meaning Unit/**  **Code text** | **Interpretation**  **of the meaning (Condensed Meaning Unit)** | **Sub-theme** | **Theme** |
| H1 | **You are setting up high KPI (Key Performance Indicators) for the lecturers but you don’t provide the necessary resources and you don’t even send them out for any training or whatsoever** | Respondents explicitly identified the importance of training and adequate resources as a means to execute the job effectively, some even expressed their frustrations over university management failing to send staff to needed training. | Lack of Appropriate Resources | Triggers of burnout among academics |

***4.3.3.4 Critical interpretation***

The critical interpretation stage is grounded on the pre-understanding and outcomes derived from the previous stages of naive reading and structural analysis, the relationship of this with that of the research questions, the context and background of study, and the related literature, with the purpose of arriving at a deeper insight into what the interview text really talks about (Gustafsson, Norberg, & Strandberg, 2008; Lindseth & Norberg, 2004). In other words, the text, the preliminary understanding, themes and relevant literature in regards to the meaning of the lived experience are all taken into consideration and, later, a final comprehensive grasp is thus formulated. Here, the process of clarification is considered as being a spiral pattern whereby the whole of the interview text is grasped by taking into consideration parts of the text and these parts too are incorporated to explain the whole (Ricoeur, 1976).

**4.4 Ethical Considerations**

To make certain this research was ethically sound, an informed consent was used. Consent was sought beforehand from potential respondents, where it outlined the aims of the research and issues of confidentiality, and willing participants were requested to sign it. Generally, the informed consent of this study (See Appendix D) involved the following:

• Purpose and procedures of the research

• The risk and benefits associated with the research

• That participating in this research is strictly voluntary in nature

• That any sort of withdrawal for any reason is permitted without any repercussions

• That all information derived from this study were strictly used for academic and research purposes alone and for no other reasons

• That other demographic details (such as age, gender) were for identification and coding purposes only.

For the interviews, participants were informed and educated on the definition of burnout, work engagement, and resilience prior to the start of the data collection process to ensure that results from the data could be broken down to convey the most accurate meanings to explain the structural depiction of the phenomena. Other than using the aid of a Computer-Assisted Qualitative Data Analysis (CAQDAS) software (ATLAS.ti) for data storage, data were also stored using two different forms, namely a hard drive and CD rom, and were organised and clearly labelled to be easily located and physically accessible. All participants were emailed their transcripts and were asked if they would like to review them before the data analysis took place.

**4.5 Preliminary Data and Findings: The Pilot Phase**

**4.5.1 Purpose**

The goal of this pilot study is to provide the needed information that can contribute to the realisation of the research project as a whole, in addition to exploring the interconnections between burnout, work engagement, and resilience among university academics in Malaysia. Here, the levels of burnout and work engagement of these university academics are also further examined and this study intends to investigate the factors Malaysian academics identify as influencing their burnout, work engagement, and resilience levels.

**4.5.2 Preliminarily stage to the pilot study**

Before conducting the pilot phase, a preliminary stage existed to form the base for the actual pilot study.

***4.5.2.1 Expert review***

Initially, a panel of six individuals having knowledge in the administration and interpretation of objective psychological tests and methodological issues associated with survey research reviewed the items of the questionnaire. These individuals participated in taking the burnout survey administered the same way as the actual study (online) and to evaluate the items and whether their content measured the intended constructs. These individuals were also tasked at identifying any problematic items commonly associated with survey questionnaires. These six individuals read through the items of the Maslach Burnout Inventory-Educators Survey, the Engaged Teachers Scale, the 14-Item Resilience Scale, the workload subscale of the Areas of Work life Scale and the Pressure to Publish scale, respectively. A list of the comments received from these individuals were appropriately addressed and are described below.

Table 4.7. Comments and observations identified in expert review

|  |  |
| --- | --- |
|  | Comments/observations |
| Survey layout /Presentation | * Good and easy to follow layout. However, difficulty was faced in having to scroll up and down to refer to the scale due to many items on a page. * The layout of the online survey looks professional, instructions are clear and concise. |
| Terminology/wording/ language | * The language used is comprehensible and easy to understand. * In one section of the Emotional Exhaustion section, an item: “I feel like I am at the end of my rope” would need to be added an explanation/or ‘help text’ as to what this statement actually refers to. * Terminologies used were easy to understand. No technical jargon were involved. |
| Sensitive questions | * No emotive items were included in the survey as it could make people defensive and this may invalidate answers. |
| Time Frame | * All six respondents managed to complete the questionnaire within the appropriate time frame * All respondents agreed that the survey was a fitting length and were assured that actual respondents will not be exhausted to complete it. |

Based on this expert review, improvements and adjustments to the survey instrument and relevant items were made.

**4.5.3 Methods**

***4.5.3.1 Study design***

This pilot study served as a pre-test exploration and used standard questionnaires to assess burnout, work engagement, and resilience. The methodology for the pilot study was structured on the framework of the proposed larger study, but on a smaller scale and being structured specifically to provide information that would improve reliability, rigour, and increase recruitment success and data outcomes. The principal researcher recruited participants by emailing the targeted group and included within the email a link inviting them to participate. The Department of Education Ethics Committee at The University of York approved this study and the investigation was conducted in accordance with the relevant principles.

The developed survey consisted of two main parts – questionnaire for assessment of burnout, engagement, resilience, workload, and perceived Pressure to Publish, as well as a demographic questionnaire. The whole questionnaire was implemented and administered as an online survey tool provided by Qualtrics. The full version can be found in the Appendix.

***4.5.3.2 Participants and procedure***

In a pilot study, it is vital that the sample closely matches the population to which the measure will be applied later in the main phase of the study (DeVellis, 2012). The pilot sample consisted of 102 academics (M= 38.9 years, SD = 8.9; range 24–66 years) from various Malaysian public and private higher learning institutions. Participants were recruited by an email that was sent out to a list of over 1,000 Malaysian academics. Their average experience length of participants as an academic was 10 years (SD = 7.45), ranging from 1 to 38 years. The inclusion criteria included the following: a) academics who are employed on a full-time basis, and b) Malaysian citizens, working in either public or private HLIs in Malaysia.

The demographic makeup for the pilot study ranged from the ages of 24 years to 66 years (mean = 38.9 years, SD = 8.9). The majority were in the 35 to 44 years age group. Respondents in this study were mostly females, comprising 66.7% of the total, whereas 33.3% were males. With regards to academic post, 2.9% of the study participants held Professorial posts, 3.9% were Associate Professors, 3.9% were Assistant Professors, Lecturers, 29.4%, Senior Lecturers, 46.1%, Tutors, 2.0% and ‘Others’ constituting 11.8% of the overall, which includes other relevant post such as University Teachers and Junior Lecturers. From the responses, 7.9% of participants had served fewer than two years, 12.7% served between 2 to 4 years, 16.7% served for 5 to 7 years, 19.7% for between 8 to 10 years, and 42.4% served more than 10 years.

***4.5.3.3 Reliability of the instrument***

Based on the responses from the pilot study, Cronbach’s alpha was calculated to measure the internal consistency reliability of all instruments. A Cronbach’s alpha value greater than 0.7 of a given instrument is considered reliable (Bland & Altman, 1997; Nunnally, 1978). Although there are different reports about the acceptable values of alpha, ranging from 0.70 to 0.95 (Bland & Altman, 1997) the standards for what makes a good Cronbach’s alpha value are entirely arbitrary and depend on one’s theoretical knowledge of the scale in question. Many methodologists recommend a minimum Cronbach’s alpha value between 0.65 and 0.8 (or higher in many cases); values that are less than 0.5 are usually unacceptable, especially for scales purporting to be unidimensional (Bland & Altman, 1997). Table 4.8 summarises the entire result of Cronbach’s alpha values for the study.

Table 4.8. Tests of reliability of the questionnaire

|  |  |  |
| --- | --- | --- |
|  | **No of items** | **Cronbach’s Alpha** |
| Part I: Engagement | 16 | 0.88 |
| Part II: Emotional Exhaustion | 9 | 0.90 |
| Part III: Resilience | 14 | 0.90 |
| Part IV: Workload | 5 | 0.50 |
| Part V: Pressure to Publish | 12 | 0.94 |

***4.5.3.4 Relationship between variables***

Bivariate correlation was computed among variables to determine the significant relationships among them. Table 4.9 illustrates the means, standard deviation, and intercorrelations of the study. Generally, the correlations range from weak to moderate and strong.

Table 4.9. Means, standard deviation and intercorrelations of variables (n = 102)

|  |
| --- |
| **Variable M SD 1 2 3 4 5** |
| **1. Emotional Exhaustion** 14.85 11.16  **2. Pressure to Publish** 37.01 9.40 .36\*\*  **3. Years of experience**  10.91 7.45 -.16 -.10  **4. Resilience** 95.80 19.11 -.26\*\* -.20\* .08  **5. Engagement** 83.05 8.30 -.35\*\* -.24\* .17 .33\*\*  **6. Workload** 4.03 .32 .15 .07 -.02 -.53\*\* -.02 |
| \* Correlation is significant at the 0.05 level (2-tailed).  \*\* Correlation is significant at the 0.01 level (2-tailed). |

*Relationship between burnout and work engagement*

A significant negative relationship with Emotional Exhaustion was found for engagement (r= -0.35, p< 0.01) based on the above results. Academics who reported a lesser degree of engagement in their work are the ones who are more emotionally exhausted. Here, burnout shows a moderate inverse relationship with engagement, in that the higher degree of burnout reported the lesser the engagement levels.

*Relationship between burnout and Pressure to Publish*

In Table 4.9 above, results show Pressure to Publish has a significant and positive relationship with that of Emotional Exhaustion (r = 0.36, p< 0.01) indicating that academics who reported higher feelings of being under Pressure to Publish displayed higher levels of Emotional Exhaustion than those who reported lower feelings of being under pressure. According to this result, academics’ levels of burnout are indeed affected by their perceived feelings of Pressure to Publish.

*Relationship between burnout and resilience*

In regard to Emotional Exhaustion and resilience, a significant negative relationship was found (r = -0.26, p< 0.01). Academics scoring low on resilience showed a contrasting higher score in the Emotional Exhaustion dimension, indicating that there is a counter direct relationship between levels of resiliency and levels of burnout of academics.

*The relationship between burnout and workload*

For Emotional Exhaustion and workload, a positive correlation (r =. 15, p > 0.01) between these two constructs was found, supporting the third hypothesis of the present study. Workload is positively associated with burnout; academics who experience a high level of perceived workload will report higher levels of burnout. The interaction of both factors was non-significant.

*Relationship between engagement and resilience*

Results show Engagement to have a significant and positive relationship with resilience (r= 0.33, p< 0.01), demonstrating that academics who reported higher levels of individual resilience also reported higher levels of Engagement than those reporting lower degrees of resilience. As an academic’s resilience increased, so did their levels of engagement with their work.

*Relationship between burnout and years of experience*

For Emotional Exhaustion and years of experience, results show an inverse correlation (r = -.16, p> 0.01), however, it was not a significant one. Although the relationship was weak, this nevertheless supports the fourth hypothesis of the present study, i.e. the years of experience an academic has is negatively related with burnout; or the more experience an academic has, the fewer experiences of burnout he/she will face.

*Relationship between years of experience and resilience*

A positive and non-significant relationship with years of experience was found for resilience (r= 0.08, p> 0.01) based on results. This nevertheless was very weak. Academics who have been in academia for a longer period of time reported a higher degree of resilience compared to their juniors who have spent fewer years in academia. Therefore, academics with more years of experience, reported to be more resilient.

*Relationship between years of experience and Pressure to Publish*

For Years of experience and Pressure to Publish, results of correlations show an inverse relationship (r = -.10, p> 0.05), demonstrating that the more experience an academic has, the less likely he/she will experience the feelings of Pressure to Publish. The interaction of these two factors was non-significant.

Other correlations between variables which were found to be significant included that of Engagement with Pressure to Publish (r= -0.24, p< 0.05) and resilience with Pressure to Publish (r= -0.20, p< 0.05).

Table 4.10. Hypotheses results (pilot study)

|  |  |  |
| --- | --- | --- |
| No | Hypothesis | Results |
| H1 | Burnout is negatively correlated with engagement; academics who experience a high level of burnout will report lower levels of engagement. | Supported |
| H2a | Academics’ levels of burnout are positively related with workload. | Supported |
| H2b | There is a positive relationship between academics’ levels of burnout with perceived feelings of Pressure to Publish. | Supported |
| H3a | Academics’ levels of burnout have a negative relationship with their resiliency levels. | Supported |
| H3b | Academics’ levels of resilience have a positive relationship with work engagement. Academics with high levels of resilience will also have high levels of engagement towards work. | Supported |
| H4a | Years of experience is negatively correlated with burnout; that is, the more years of experience an academic has, the less he/she will express symptoms of burnout. | Supported |
| H4b | Years of experience is positively correlated with resilience; that is, the more years of experience an academic has, the more likely he/she will express resiliency. | Supported |
| H4c | Years of experience is negatively correlated with Pressure to Publish; that is, the more experiences an academic has, the less likely he/she will report feelings of Pressure to Publish. | Supported |

***4.5.3.5 Data analysis***

To evaluate the measurement model for resilience and burnout-engagement in university academics for the pilot data, confirmatory factor analysis (CFA) was conducted on the group of factors using Mplus software package version 7.3. (Muthen & Muthen, 2006) with maximum likelihood estimation (MLM). Whenever robust parameter estimation is used, Chi-Square difference tests between nested models are inappropriate because the Chi-Square are not distributed as Chi-Square. Hence, this can be conducted using the correction formula (Satorra & Bentler, 2001).

The software package for Structural Equation Model (SEM), Mplus was used in the pilot study due to it: (1) offering several options to handle categorical (including Likert-type scale) and non-normal data; (2) can model both continuous latent variables and categorical latent variables; (3) can analyse multilevel SEM with complex sample data; and (4) can correctly analyse a correlation matrix using constrained estimation methods (Muthen & Muthen, 2010).

The goodness-of-fit of the models was evaluated by fit indices such as, the Chi-Square Test, root mean square error of approximation (RMSEA), comparative fit index (CFI), Tucker-Lewis fit index (TLI), and standardised root mean square residual (SRMR). For the RMSEA and SRMR indices, values less than .05 indicate a good fit, and values as high as .08 represent an acceptable fit (Browne & Cudeck, 1993). As a rule of thumb for the TLI and CFI indices, values greater than .95 are indicative of good fit, whereas values greater than .90 are considered acceptable (Hu & Bentler, 1999). CFA was used to create the measurement models in order to test for the research questions.

**4.5.4 Results and Discussion**

***4.5.4.1 Structural equation modeling (SEM)***

As the validity and reliability of variables were not challenged, analysis of the data proceeded to the SEM model fit. As 200 is seen as a goal for SEM research the sample size for this pilot study was considered small, n = 102. However, according to Kenny (2015) lower sample sizes can be used for simpler models and for the purpose of this pilot study. Model fit refers to the extent the hypothesised model is consistent with the data (Byrne, 2012). In SEM analysis, the closer the estimated covariance matrix gets to the sample/data covariance matrix, the better the model fits (Byrne, 2012). The SEM analysis for this pilot phase followed the method suggested by Byrne (2012). The best fitting model is determined first, then the most parsimonious model. Once the final model is established, the remaining non-significant parameters are deleted.

***4.5.4.2 Structural model***

Now that a best-fitting substantively, appropriate measurement model has been established, the input file for the initial hypothesised model is created. The fit statistics for the initial model indicated that the data did not fit the model well (RMSEA = .10, CFI =.71, TLI =. 69, SRMR =.10, χ2 (553) = 1193.33, p <.05). For a better fit, modifications of the initial model were attempted. Modifications of the model are necessary but require theoretical support (Loehlin, 2004; Long, 1983). Modifications of the initial model were informed by the modification indices provided by Mplus. The indices suggested that if items of Pressure to Publish (PPTOT) were allowed to correlate with one another, the same goes with items of engagement (ETS) and Emotional Exhaustion (EE), a better fit will be achieved. Theoretically the modifications were reasonable. Therefore, the errors for these pairs of constructs were allowed to correlate.

The second model displayed improved fit. Both CFI and TLI were closer to .90, and RMSEA and SRMR showed improved values in comparison to the initial model, (RMSEA =. 08, CFI =. 83, TLI =. 81, SRMR= .08, χ2 (526) = 276.858. Based on these results, the models were reviewed again for better fit. The modification indices suggested that a better fit could be attained with the incorporation of an additional five covariance paths; involving items ETS, EE, and also ‘years of experience’ (YEARX) to correlate with that of ‘engagement’ (F5), respectively. The addition of these paths led to a statistically significant improvement of the model, with CFI= .92, TLI= .91, RMSEA= .05, SRMR= .08 showing an acceptable fit of the third model in the sample. This third model thus served as the final model. The fit indices for models are shown in Table 4.11.

Table 4.11. SEM fit of model (N=102)

Model χ2/df (p value) CFI TLI RMSEA SRMR

Initial model 1193.33/553 (.0000) .71 .69 .10 .10

Second model 276.858/526 (.0000) .83 .81 .08 .08

Final model 139.289/510 (.0000) .92 .91 .05 .08

Looking at the final model, interestingly, burnout was found to be not significantly related to engagement, unlike resilience. However, as expected, resilience did have a significant association with academics’ work engagement and it was found that these two variables do positively influence one another. It was also found that higher levels of resilience were associated with lower levels of emotional exhaustion among academics.

When it comes to years of experience, the link between years of experience and engagement was strong (.55). Further, it was found that the higher number of years of experience academics had in their career were linked with higher levels of engagement towards work, indicating a direct and positive relationship. In contrast, the link between years of experience and burnout was weak (.11), but as expected having an inverse association with one another.

Also in accordance with the researcher’s expectations, Pressure to Publish had a direct positive effect on emotional exhaustion, supporting the study hypothesis that higher levels of Pressure to Publish felt by academics were related to increased levels of feeling emotionally exhausted or burning out. Finally, based on the results of this pilot study, both Pressure to Publish and resilience did show a significant relationship with years of experience. For resilience it showed a positive relationship, supporting the hypothesis that the more years of experience an academic has, the more resilient they are and for Pressure to Publish a negative relationship, showing that the longer the academics are in academia, the less likely they will experience feelings of Pressure to Publish.

**4.5.5 Pilot study: For qualitative phase**

A pilot study for the qualitative phase was also conducted by the researcher, aiming at testing the interview guide which was prepared based on the theoretical framework, previous research, and gaps in the existing literature. A Malaysian academic was interviewed for this process. An excerpt of the qualitative interview is made available in Appendix E. The pilot interview was conducted in the Mill Building, University of Manchester on June 14, 2016.

**4.5.6 Conclusions from pilot studies**

The pilot study delivered preliminary evidence that indicators such as the lack of individual resilience, Pressure to Publish, and years of experience influence the occurrence of burnout among academics in higher learning institutions and, moreover, hinders them from developing a deeper degree of work engagement. This is important since burnout can be viewed as a barrier to being engaged in work (Freeney & Tiernan, 2009). Even though some relationships between certain factors in this pilot study were found to be insignificant, the relationship nevertheless exists, linking burnout to these variables. Furthermore, with only 102 participants, the researcher’s primary aim was not to test the hypotheses but rather to generate empirical evidence, on which hypotheses can be based in the actual main study to be conducted. Furthermore, the sample size observed in this pilot study can be used to estimate the ideal sample size in the forthcoming main study.

**Chapter Five: Quantitative Findings from the Data**

**5.1 Introduction**

The first part of this chapter includes a depiction of the demographic information of the subjects presented in frequency and percentage. Additionally, the reliability of all variables of this study are reported to establish the usefulness of the instrument and a correlation matrix of the continuous variables is also presented to give a rough idea of the relationships among variables. The chapter then presents the statistical analysis results of the hypothesised model and parameter estimates. The statistical method employed in the study included that of descriptive statistics, Cronbach alpha coefficients, Pearson product-moment correlation coefficients, hierarchical multiple regression, multivariate analysis of variance (MANOVA), and structural equation modelling. SPSS and Mplus programmes were used for the statistical analysis

**5.2 Demographic Characteristics of Participants**

Distribution of questionnaires was done during the months of October through December 2016. With 681 questionnaires received, the response rate was 9%, with the majority of respondents being female (67.4%). Overall, 681 sets were subjected to analysis. Table 5.1. highlights the demographic information of the 681 respondents of this study.

Table 5.1. Frequency table displaying characteristics of the sample

|  |  |  |  |
| --- | --- | --- | --- |
| Personal Characteristics | | Frequency (N=681) | (Percentage %) |
| Age | 25 to 34 years | 208 | 30.5 |
| 35 to 44 years | 277 | 40.7 |
| 45 to 54 years | 138 | 20.3 |
| 55 years and older | 58 | 8.5 |
| Gender | Male | 222 | 32.6 |
| Female | 459 | 67.4 |
| Ethnic Group | Malay | 513 | 75.3 |
| Chinese | 95 | 14.0 |
| Indian | 42 | 6.1 |
| Others | 31 | 4.6 |
| Current Academic Post | Professor | 43 | 6.3 |
| Associate Professor | 94 | 13.8 |
| Assistant Professor | 87 | 12.8 |
| Senior Lecturer | 192 | 28.2 |
| Lecturer | 233 | 34.2 |
| Tutor | 5 | 0.8 |
| Other | 27 | 3.9 |
| Years Spent as an Academic | 5 years or less | 196 | 28.8 |
| 6 to 15 years | 322 | 47.3 |
| 16 to 25 years | 114 | 16.7 |
| 26 to 35 years | 37 | 5.4 |
| More than 35 years | 12 | 1.8 |
| Institution Type | Public University (Research) | 227 | 33.3 |
| Public University (Non-Research) | 218 | 32.0 |
| Private University | 236 | 34.7 |
| Marital Status | Single, never married | 155 | 22.6 |
| Married without children | 59 | 8.6 |
| Married with children | 440 | 64.2 |
| Divorced | 16 | 2.2 |
| Widowed  Other | 7  4 | 0.9  1.5 |

The demographic makeup for the study consisted of 681 academics from various universities over Malaysia, ranging from 25 years of age to 55 years and older (mean = 40.2 years, SD = 8.8). The majority fell in the 35 to 44 years age group. Respondents in this study were mostly females, comprising 67.4% of the total whereas 32.6% were males. Of the 681 respondents, over half of the sample, 75.3%, were Malays, 14% were Chinese, and 6.1% were Indian. In the “Others” category were the remaining 4.6%. The majority of respondents were ‘Married with children’, 64.2%, followed by single, never married, 22.6%, married without children, 8.6%, and 2.2% of the sample divorced, 0.9 % widowed, and the remaining 1.5% were in the “Other” category.

With regards to academic post, 6.3% of the study participants held Professorial posts, 13.8% were Associate Professors, 12.8% were Assistant Professor, Senior Lecturers accounted for 28.2% of the sample, Lecturers, 34.2%, Tutors, 0.8% and ‘Other’ constituted 3.9% of the overall, which includes other relevant posts such as University Teachers and Junior Lecturers. The length of years of experience in academia was also gathered through the questionnaire. From the responses obtained, 28.8% of participants served for five years or less, 47.3% served between 6 to 15 years, 16.7% served for 16 to 25 years, 5.4% for a duration of 26 to 35 years, and the remaining 1.8% served for more than 35 years. As mentioned previously in the literature review, academics’ experience was divided across five career stages depicting that which is suggested by Huberman (1989) by years in the field.

For the present study, academics with five years or less of experience (28.8% of the sample) are considered in the Survival or Discovery stage of their career, those between the duration of 6 to 15 years of experience (47.3%) are in their Establishment (i.e. early career stage), 16 to 25 years (16.7%) in the Advancement stage (or middle career), 26 to 35 years (5.4%) the Maintenance stage (late career) and lastly more than 35 years of experience (1.8%) are in the Withdrawal stage of their academic career (or departure stage) (Cummings & Worley, 2001; Huberman, 1989). Such stages do not necessarily fit comfortably onto the years of experience brackets, and in society there does not exist a unified agreement on the definition of “career stage” (Huberman, 1989). Hence, careers stages can also be identified by the number of years in service/experience. Of recent literature, most would agree that the early career phase would accommodate that of 10 years or less within an individual’s experience (Dyrbye et al., 2013; Griffin, Hogan, & Lambert, 2014).

Public research university academics made up 33.3% of the overall sample, 32.0% are from the non-research public universities and the majority (34.7%) came from private universities.

**5.2.1 Sample representativeness**

Given the modest response rate in this study, caution ought to be applied in interpreting the data and making conclusions relating to the academic population as a whole. Nevertheless, the demographic characteristics of respondents with respect to age, gender, ethnicity,and academic post were broadly similar to the characteristicsof the total population from which these academics weredrawn. Additionally, the distribution of the respondents in this study illustrates and fits that of the target population for the background demographics.

To assure the representativeness of the sample, the study sample was examined by comparing demographic data obtained from the survey with that of other similar studies incorporating Malaysian academics. This revealed that the sample obtained is representative in terms of age of the population from which they were drawn. For instance, the average age of academics in Malaysia in one 2016 study by Saad & Zainol Ariffin was comparable to the mean age of this present study i.e., M = 40.21. As was another study in regards to job satisfaction and turnover intention of Malaysian lecturers (Azalea & Lin, 2015) and the sample was representative of the academic population in terms of not only gender (33 per cent were male and 67 per cent of participants were female) but also of geography (all areas were represented which encompassed universities in the urban, rural, and remote settings respectively). Moreover, the present sample of academics does also represent those academics serving the various types of universities currently existing in Malaysia i.e. public-research universities, public non-research universities, as well as private universities in an equal manner. The diverse categories of academic posts are also equally represented for both public and private (see Table 5.2). The percentage of academics in each post reflects the national Malaysian sample in academia (Ministry of Higher Education Malaysia, 2015).

In regards to ethnic distribution, 513 participants are Malay (75.3%), 95 are Chinese (14%), 42 Indian (6.1%), and 31 from other ethnic groups (4.6%) (See Table 5.1). This distribution comparably coincides with the 2016 national Malaysian population by ethnicity (Index Mundi, 2016, <http://www.indexmundi.com/malaysia/demographics_profile.html>) in that the proportions of Malays, Chinese, and Indians in this study sample similarly correspond with the proportions of the national population. To this, generally, although the response rates of this study are indeed modest, nevertheless the present sample breakdown in terms of the demographic items mentioned above is consistent with other similar studies of Malaysian academics and of the Malaysian national population as a whole, suggesting representativeness of the population studied.

Table 5.2. Number of academics staff by gender and highest qualification in Malaysian higher education institutions for the year 2015 – 2016

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Level of Studies | Higher Education Institutions Category |  | Academic Staff | | | |
| Male | Female | Male Female | Total |
| Ph.D. | Public University | 7,494 | 6,431 | 54% 46% | 13,925 |
| Private University | 3,855 | 1,331 | 74% 26% | 5,186 |
| Master | Public University | 6,168 | 9,131 | 40% 60% | 15,299 |
| Private University | 11,525 | 7,534 | 60% 40% | 19,059 |
| Bachelor | Public University | 970 | 1,420 | 41% 59% | 2,390 |
| Private University | 6,129 | 3,045 | 67% 33% | 9,174 |
| Diploma | Public University | 75 | 34 | 69% 31% | 109 |
| Private University | 507 | 113 | 82% 18% | 620 |
| Other | Public University | 89 | 65 | 58% 42% | 154 |
| Private University | 445 | 266 | 63% 37% | 711 |
| Total | Public University | 14,796 | 17,081 | 46% 54% | 31,877 |
| Private University | 22,461 | 12,289 | 65% 35% | 34,750 |

Source: Ministry of Higher Education (MOHE) Malaysia Portal Note: The data reported here have been supplied by the Home Office of the Ministry of Higher Education (Malaysia) and can be read from https://www.mohe.gov.my/

**5.3 Reliability of the Instrument**

Based on the responses from the study, reliability tests were done to check the internal consistency and usability of all measurements. To measure the internal consistency reliability for each of the instruments, Cronbach’s alpha was thus calculated. Alpha is expressed between a number of 0 and 1 (Cronbach, 1951). Internal consistency describes the extent to which all items of a particular test measure the same concept or construct and therefore is associated to item inter-relatedness within the test (Tavakol & Dennick, 2011). Table 5.3 summarises the entire result for Cronbach’s alpha values of the relevant scales for the study.

Table 5.3. Tests of internal consistency of the questionnaire

|  |  |  |
| --- | --- | --- |
|  | **No of items** | **Cronbach’s Alpha** |
| Engagement  Emotional Exhaustion | 6  8 | 0.79  0.90 |
| Resilience | 9 | 0.87 |
| Workload | 5 | 0.85 |
| Pressure to Publish | 11 | 0.92 |

As all the scales showed acceptable results, they were hence, accepted for further study.

**5.4 The Relationship between Variables**

Bivariate correlations were computed among variables to determine the significant relationships among them. Table 5.4 illustrates the means, standard deviation, and inter-correlations of the study. Generally, the correlations ranged from weak to moderate and strong. In describing the correlational strength, Taylor (1990) offered these guidelines, whereby *r* values ≤ 0.35 are generally considered to represent low or weak correlations, 0.36 to 0.67 modest or moderate correlations, and 0.68 to 1.0 strong or high correlations.

Table 5.4. Means, standard deviation and intercorrelations of variables (N = 681)

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Variable** | **M** | **SD** | **1** | **2** | **3** | **4** | **5** |
| **1. Emotional Exhaustion** | 17.37 | 11.60 |  |  |  |  |  |
| **2. Pressure to Publish** | 36.74 | 8.63 | .38\*\* |  |  |  |  |
| **3. Years of experience** | 11.26 | 8.33 | -.09\* | -.09\* |  |  |  |
| **4. Resilience** | 53.21 | 5.74 | -.20\*\* | -.21\*\* | .19\*\* |  |  |
| **5. Engagement** | 30.08 | 4.51 | -.17\*\* | -.10\*\* | .19\*\* | .41\*\* |  |
| **6. Workload** | 15.13 | 3.61 | .49\*\* | .26\*\* | -.05 | -.17\*\* | -.10\* |

\* Correlation is significant at the 0.05 level (2-tailed).

\*\* Correlation is significant at the 0.01 level (2-tailed).

Note: M = Mean; represent the aggregation of Likert scores of the individual scales of each variable, hence, are not comparable. Refer to Table 5.5 below for full item mean values and scale range for each variable.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Table 5.5. Item mean values and scale range of the MBI-ES, Pressure to Publish, RS-14, ETS and AWS-Workload | | | |
| Scale name | | Scale range | Item range | Item mean values |
| MBI-Educators Survey  Emotional Exhaustion | | 7-point scale for responses. An answer can range from “Never” to Every day.” Lowest achievable score = 0, highest achievable score = 48). | 0 - 48 | 6 |
| Pressure to Publish | | An 11-item, 5-point scale (ranging from "Strongly Disagree" to "Strongly Agree"). | 11 – 55 | 5 |
| 14-Item Resilience Scale  (RS-14) | | 7-point Likert scale from Strongly Disagree to Strongly Agree. | 14 - 98 | 7 |
| ETS-Engagement | | 7-point Likert scale from Never = 0 to Always = 6. | 0 - 36 | 6 |
| AWS-Workload | | 5-point Likert scale, between 1 and 5 ranging from Strongly Disagree to Strongly Agree. | 5 - 25 | 5 |

**The relationship between burnout and work engagement**

A significant negative relationship with Emotional Exhaustion was found for engagement (r = -0.17, p < 0.01) based on the above results. Academics who reported a lesser degree of engagement in their work were found to be more emotionally exhausted. Here, burnout shows a small inverse relationship with engagement, in that the higher degree of burnout reported, the lower the engagement levels. This result supported the first hypothesis i.e. burnout is negatively correlated with work engagement.

**The relationship between burnout and Pressure to Publish**

In Table 5.4 above, results show Pressure to Publish to have a significant and positive relationship with Emotional Exhaustion (r = 0.38, p < 0.01), indicating that academics who reported higher feelings of being under Pressure to Publish also displayed higher levels of Emotional Exhaustion than those who reported lower feelings of being under pressure. In other words, as an academic’s perceived Pressure to Publish increased, so did their levels of Emotional Exhaustion. According to this result, academics’ levels of burnout are indeed affected by their perceived feelings of Pressure to Publish, supporting the second hypothesis of the study.

**The relationship between burnout and resilience**

In regards to Emotional Exhaustion and resilience, a significant negative relationship was found (r = -0.20, p < 0.01) between the two variables. Academics scoring low on resilience showed a contrasting higher score in the Emotional Exhaustion dimension, signifying that there is a counter direct relationship between levels of resiliency and degrees of burnout in academics. This finding is in line with the hypothesis of the study that academics’ levels of burnout are influenced by their levels of resilience.

**The relationship between burnout and workload**

For Emotional Exhaustion and workload, a significant and positive correlation (r = .49, p < 0.01) was found. This was a moderate relationship, supporting the third hypothesis of the present study, i.e. workload is positively associated with burnout; academics who experience a high level of perceived workload will report higher levels of burnout. This relationship was also the strongest of the correlations within the matrix for the academics. Workload is known to be one of the organisational risk factors of burnout whereby a manageable workload will tend to sustain energy, and accordingly oppose the risk of burnout (Portoghese, Galletta, Coppola, Finco, & Campagna, 2014). On the other hand, an incongruity in workload denotes that academics may feel overused and/or lack sufficient time to perform the job. Work overload is a major source of exhaustion that, sequentially, is at the root of burnout (Leiter & Maslach, 2005). The above correlation exhibits that the probability of academics having a mismatch of workload in their academic life may well exist.

**The relationship between engagement and resilience**

Results show Engagement to have a significant and positive relationship with resilience (r = 0.41, p < 0.01), indicating that academics reporting higher levels of individual resilience also showed higher levels of Engagement than those who reported lower degrees of resilience. As an academic’s resilience increased, so did their levels of engagement towards work.

**The relationship between years of experience and work engagement**

For years of experience and work engagement, results of correlations show a significant positive relationship (r = .19, p < 0.01), demonstrating that the more experience an academic has, the more likely he/she will experience being engaged in their work. Here, we reject the null and accept the alternative hypothesis, i.e. Hypothesis 5a.

**The relationship between burnout and years of experience**

For Emotional Exhaustion and years of experience, results show an inverse and significant relationship (r = -.09, p < 0.05). Although the relationship was weak, this nevertheless supported Hypothesis 5b of the present study, i.e. the years of experience an academic has is negatively related to burnout; or the more experience an academic has, the fewer experiences of burnout he/she will encounter. On the flip side, this could also imply an issue of a “survival” effect. That is, those with high potential for burnout would have already left the profession and hence be missing from the sample altogether, leaving those who consequently exhibit much lower degrees of burnout (Maslach, Schaufeli, & Leiter, 2001). Therefore, caution should be taken when interpreting such results (See Experience-level differences section 5.6.1 below for further explanation on this matter).

**The relationship between years of experience and Pressure to Publish**

For years of experience and Pressure to Publish, results of correlations show a significant negative relationship between the two variables (r = -.09, p < 0.05); however, this is not very substantial. This correlation demonstrates that the more experience an academic has, the less likely he/she will experience feelings of Pressure to Publish. Here, we reject the null and accept the alternative hypothesis (H5c).

**The relationship between years of experience and resilience**

A significant positive relationship with years of experience was found for resilience (r = 0.19, p < 0.01) based on the above results. Academics who have been in academia for a longer period of time reported a higher degree of resilience compared to their junior colleague who have spent fewer years in academia. Therefore, academics with more years of experience reported being more resilient in their career. This supports H5d of the study. The academics in this sample could also perhaps be from the group of academics who are more resilient, having been equipped with the capacity to bounce back against pressure much quicker than others. Some would also claim that younger generations of academics are less resilient than older, but others would point to the younger cohort having to deal with entirely different challenges and a much more demanding new academic order (of increased expectations, mounting competitive pressures, heightened academic productivity, etc.) as discussed by Kwiek (2017) in his ‘Generational Divide in the Academic Profession’ article.

Other correlations between variables which were found to be significant included that of engagement with Pressure to Publish (r = -0.10, p < 0.01), resilience with Pressure to Publish (r = -0.21, p < 0.01), workload with Pressure to Publish (r = 0.26, p < 0.01), and workload with resilience (r = -0.17, p < 0.01).

**5.4.1 The relationship between variables by gender**

A correlation in regards to gender was also explored and the correlation coefficients of the variables are shown in Table 5.6 below. According to the analysis concerning the data of male academics, there is significant correlation among all variables, except for the relationship of burnout with resilience and engagement, engagement with both Pressure to Publish and years of experience, and workload with resilience and engagement.

For the female data, all showed significant correlations except for years of experience with burnout and Pressure to Publish, and years of experience with workload. In aspects of the strength of the relationship, all ranged from no relation, weak to moderate. Drawing out the important differences between the genders are, for the female data, the strongest of the correlations within the matrix for female academics was for emotional exhaustion and workload (r = 0.52), whereas for the male academics, the relationship for these two variables was (r = 0.39). On the other hand, the strongest of the correlation coefficient for the male data was the relationship between resilience and engagement, (r = 0.50), which for female academics was (r = 0.39) respectively. All things considered, the hypothetical model of this study is worth further analysis.

Table 5.6. Summary of the correlation coefficient intercorrelations of variables by gender (*𝑛male = 222, 𝑛female = 459*)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Variable** | **1** | **2** | **3** | **4** | **5** | **6** |
| **1. Emotional Exhaustion** | 1 | 0.34\*\* | -0.19\*\* | -0.12 | -0.13 | 0.39\*\* |
| **2. Pressure to Publish** | 0.31\*\* | 1 | -0.21\*\* | -0.23\*\* | -0.06 | 0.18\*\* |
| **3. Years of experience** | -0.00 | -0.00 | 1 | 0.23\*\* | 0.12 | -0.23\*\* |
| **4. Resilience** | -0.23\*\* | -0.20\*\* | 0.15\*\* | 1 | 0.50\*\* | -0.08 |
| **5. Engagement** | -0.18\*\* | -0.12\* | 0.22\*\* | 0.37\*\* | 1 | -0.09 |
| **6. Workload** | 0.52\*\* | 0.28\*\* | 0.06 | -0.21\*\* | -0.09\* | 1 |

Note: the lower left value is the correlation coefficient of female academics, while the upper right value is that of male academics.∗𝑃 < 0.05; ∗∗ 𝑃 < 0.01; ∗∗∗𝑃 < 0.001

**5.5 Multiple Regression**

For this study, multiple regression analysis was computed in two separate regression analyses to determine whether 1) years of experience, workload, Pressure to Publish, and resilience had value in predicting burnout, and whether 2) resilience and burnout had value in predicting engagement (mediating relationship), simultaneously controlling for gender in both of the equations. The two separate regression equations, one for each dependent variable (DV) (i.e., burnout and engagement) was computed, as performing a multiple regression with two dependent variables simultaneously is not possible owing to SPSS. The full modelling framework incorporating both DVs (concurrently), however, was estimated using Mplus and results are displayed in the latter part of this chapter. Results of the multiple regression analyses, the standardised and unstandardised betas are depicted in Table 5.7.

Before conducting the hierarchical multiple regression, the required assumptions of the statistical analysis were taken into consideration. First of all, the sample size of 681 was deemed adequate given that four independent variables were incorporated in the analysis (Tabachnick & Fidell, 2001). All independent variables i.e. years of experience, workload, Pressure to Publish, and resilience were also not a combination of other independent variables, hence the assumption of singularity was met. A review of the correlations (see Table 5.4), depicted that no independent variables were highly correlated with one another and as the collinearity statistics (i.e., Tolerance and VIF) were all within limits that were adequate, the assumption of multicollinearity was believed to have been met (Coakes, 2005). For residual and scatter plots, all assumptions of linearity, normality, and homoscedasticity were fulfilled (Hair, 1998; Pallant, 2001).

**5.5.1** **Hierarchical regression analysis: Regressing predictor variables on burnout**

Burnout served as the dependent variable in this five stage hierarchical multiple regression. In the first stage of the equation, Burnout was regressed on gender to control for the effect of this variable on other variables. Gender acted as dummy variable with two categorical levels i.e., 1 = Male, and 2 = Female. After controlling for gender, in the second stage, Years of Experience was entered. Years of Experience was added as a categorical variable (academics of this study were grouped according to the years of work experience categories 5 years or less, 6 to 15 years, 16 to 25 years, 26 to 35 years, > 35 years). The Workload variable was then entered at stage three, followed by Pressure to Publish at stage four and lastly resilience at stage five. A forward stepwise regression analysis was used in order to test a combination of variables that effectively predicted burnout. Moreover, the variables were entered by the researcher in this order as it was deemed more reasonable in determining the model's most efficient predictors of burnout. This was shown by workload showing the highest correlation with Burnout (thus, entered into the equation earliest) followed by Pressure to Publish (being the second highest in correlation with burnout), and lastly resilience (See Table 5.4). Table 5.7 below reports the intercorrelations between the multiple regression variables respectively.

The hierarchical multiple regression revealed that at Stage one gender accounted for 1.3% of the variability of the outcome and this change in R² was significant, F (1, 679) = 8.74, p = .003. Results indicated that after the effects of gender were controlled in Stage two, by introducing the Years of Experience variable to the equation, this contributed very little to explaining Burnout that is 0.6% of the variance, nevertheless, it was significant, F (2, 678) = 6.35, p < .01. Entering the workload variable in Stage three explained an additional 22.2% of the variation in Burnout to the regression model and this change in R² was also significant, F (3, 677) = 71.44, p < .001. In Stage four, Pressure to Publish was entered into the analyses and the results indicated that this variable was a significant predictor which accounted for an additional 4% of the variance in the level of Burnout, F (4, 676) = 66.03, p < .001. Finally, upon the addition of resilience to the regression model, the change in R² was also significant, F (5, 675) = 54.15, p < .001. In this regression equation, the most important predictor of burnout was workload (β = .41), followed by Pressure to Publish (β = .20), and resilience (β = .08). Both gender and years of experience did not make a unique significant contribution (p > .05). The outcome of the multiple regression analysis revealed that workload, Pressure to Publish, and resilience are significant predictors of burnout. Together the four independent variables accounted for 29% of the total variance in burnout.

Table 5.7. Hierarchical regression analysis: Regressing predictor variables on burnout

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | *R* | *R2* | *R2*  *Change* | *B* | *SE* | *β* | *t* |
| **Step 1** | .11 | .01\*\* | .01\* |  |  |  |  |
| Gender |  |  |  | 2.79 | .94 | .11\*\* | 2.96 |
|  |  |  |  |  |  |  |  |
| **Step 2** | .14 | .02\* | .01\* |  |  |  |  |
| Gender |  |  |  | 2.52 | .95 | .10\*\* | 2.65 |
| Years of Experience |  |  |  | -.11 | .05 | -.08\* | -1.98 |
|  |  |  |  |  |  |  |  |
| **Step 3** | .49 | .24\*\*\* | .22 |  |  |  |  |
| Gender |  |  |  | 1.55 | .84 | .06 | 1.84 |
| Years of Experience |  |  |  | -.08 | .05 | -.06 | -1.70 |
| Workload |  |  |  | 1.52 | .11 | .47\*\*\* | 14.07 |
|  |  |  |  |  |  |  |  |
| **Step 4** | .53 | .28\*\*\* | .04\* |  |  |  |  |
| Gender |  |  |  | 1.17 | .82 | .05 | 1.42 |
| Years of Experience |  |  |  | -.06 | .05 | -.04 | -1.27 |
| Workload |  |  |  | 1.36 | .11 | .42\*\*\* | 12.48 |
| Pressure to Publish |  |  |  | .28 | .05 | .21\*\*\* | 6.17 |
|  |  |  |  |  |  |  |  |
| **Step 5** | .54 | .29\* | .01\* |  |  |  |  |
| Gender |  |  |  | 1.20 | .82 | .05 | 1.47 |
| Years of Experience |  |  |  | -.04 | .05 | -.30 | -.88 |
| Workload |  |  |  | 1.33 | .11 | .41\*\*\* | 12.15 |
| Pressure to Publish |  |  |  | .27 | .05 | .20\*\*\* | 5.73 |
| Resilience |  |  |  | -.15 | .07 | -.08\* | -2.25 |

Note. Statistical significance: \*p < .05; \*\*p < .01; \*\*\*p < .001

**5.5.2 Hierarchical regression analysis: Regressing predictor variables on engagement**

The profession of teaching is well known for having many strains and demands on the job (Grund, Brassler, & Fries, 2016; Kyriacou & Sutcliffe, 1978; Van Droogenbroeck & Spruyt, 2015). Academics having the ability to draw upon crucial job resources, such as resilience, may nonetheless be inclined to become more vigorous, more engaged, and possibly will also feel stronger commitment towards their job than those without the ability to do so (Kyriacou & Sutcliffe, 1978). In contrast, however, the absence of such important job resources in combatting demands of any job may be linked with burnout, which weakens work engagement (Hakanen, Bakker, & Schaufeli, 2006). Therefore, besides a direct positive effect of resilience on engagement, an indirect negative effect (mediation where burnout is included) is also expected (Hakanen et al. 2006). When job resources or resilience are readily available they are expected to be associated with engagement, while when resilience is lacking, it is likely to be associated with burnout and consecutively with poor engagement (Schaufeli & Bakker, 2004), as burnout and engagement are each other’s opposites (Gonzalez-Roma, Schaufeli, Bakker, & Lloret, 2006). Hence, based on theoretical and empirical literature, it was hypothesised that burnout partly mediates the relationship between resilience and engagement.

***Hypothesis 4c (H4c)****.* Resilience is related to work engagement through burnout. In other words, burnout partly mediates the relationship between resilience and work engagement.

In this particular context, according to Karriker and Williams (2009), to prove the mediation of a mediating variable there must be a significant path from predictor variable to mediating variable, and from mediating variable to criterion variable, respectively. Since the paths from the predictor variable (resilience) to mediating variable (burnout) (r= -.20, p < 0.01) and from mediating variable (burnout) to criterion variable (Engagement) (r = -.17, p < 0.01) are indeed significant according to results from the Pearson Correlation Coefficient (see Table 5.4), a further analysis was conducted to test the fourth (c) hypothesis of this study. Specifically, to test for mediation, a prerequisite which is the correlation between the predictor variable and the proposed mediator variable must be significant (Baron & Kenny, 1986). As this criterion was met for resilience (predictor variable) and Burnout (mediating variable), a further analysis to test for mediation was performed.

To examine whether burnout played a mediating role in the association between resilience and work engagement, the criteria proposed by Baron and Kenny (1986) was used. In the regression equation (see Table 5.8), resilience was modelled as the independent variable, engagement as the dependent variable, burnout as the mediator, and gender as the control variable. According to Kenny (2016), for burnout to be a mediator between resilience and engagement, the following four conditions should be met: (1) resilience significantly predicts engagement; (2) resilience significantly predicts burnout; (3) burnout significantly predicts engagement; and (4) the relationship between resilience and engagement is reduced or insignificant upon the addition of burnout. If all four of these steps are met, then the data are consistent with the hypothesis that burnout completely mediates the resilience and engagement relationship, and if the first three steps are met but the Step 4 is not, then partial mediation is indicated (Kenny, 2016).

At Stage one of the equation, gender was entered and explained only a small contribution to the variability of the outcome, that is 0.2% and this change in R² was not significant, F (1, 679) = 1.59, p > .05. Results indicated that after the effects of gender were controlled, in Stage two, entering the resilience predictor to the equation, this contributed a significant additional 17% of the variance, F (2, 678) = 70.76, p < .001. In the last stage, Stage three, upon entering the burnout variable, this explained an additional 0.7% of the variation in engagement to the regression model and this change in R² was significant, F (3, 677) = 49.51, p < .001. For this regression equation (Table 5.8), the most important predictor of engagement is resilience (β = .40), followed by burnout (β = .09). Gender did not make a unique significant contribution (p > .05). Table 5.9 below shows an overall summary of the regression results.

Table 5.8. Hierarchical regression analysis: regressing predictor variables on engagement

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | *R* | *R2* | *R2*  *Change* | *B* | *SE* | *β* | *t* |
| **Step 1** | .05 | .00 | .00 |  |  |  |  |
| Gender |  |  |  | -.46 | .37 | .05 | -1.26 |
|  |  |  |  |  |  |  |  |
| **Step 2** | .42 | .17\*\*\* | .17\*\*\* |  |  |  |  |
| Gender |  |  |  | -.33 | .34 | .03 | -.97 |
| Resilience |  |  |  | .32 | .03 | .41\*\*\* | 11.82 |
|  |  |  |  |  |  |  |  |
| **Step 3** | .42 | .18\* | .01\* |  |  |  |  |
| Gender |  |  |  | -.24 | .34 | .03 | -.71 |
| Resilience |  |  |  | .31 | .03 | .40\*\*\* | 11.16 |
| Burnout |  |  |  | -.03 | .01 | -.09\* | -2.44 |

Note. Statistical significance: \*p < .05; \*\*p < .01; \*\*\*p < .001

Table 5.9. Hierarchical regression results for hypothesis h4c

|  |
| --- |
| **Model 1 Model 2 Model 3**  *β t* *β t β t* |
| Gender -.05 -1.26 -.03 -.97 -.03 -.71  Resilience .41\*\*\* 11.82 .39\*\*\* 11.16  Burnout -.09\* -2.44  R² .00 .17\*\*\* .18\*  Adjusted R2 .00 .17 .18 |

\*p < .05; \*\*p < .01; \*\*\*p < .001

In regards to mediation, the variance of the relationship between resilience and engagement was reduced after burnout was added into the regression equation in Model 3 (from β = 0.413 to β = 0.396, *p* < 0.001; Sobel test, z = 3.12, p < 0.01), with standard error of regression coefficient for the association between resilience and burnout being = .08 and the standard error of coefficient for the association between burnout and work engagement, = .01 (See Figure 4). This suggests that burnout mediates the relationship between resilience and engagement. It is also revealed that burnout negatively mediated the effect of resilience on engagement. From the results, burnout showed partially mediating effects on the correlations between Resilience and engagement. Therefore, burnout mediated the effect of resilience on work engagement, hence Hypothesis 4c of the study was accepted.

-.40\* (.08)

-.04\* (.01)

(Mediator)

Burnout

Engagement

Resilience

3.12\*, p < 0.01

Sobel test of indirect effects

Figure 4. Illustration of the mediation model for burnout

**5.6 Multivariate Analysis of Variance**

In order to investigate gender and experience groups in burnout, engagement, resilience, workload, and Pressure to Publish scores, a two-way MANOVA was conducted. The set of dependent variables consisted of Emotional Exhaustion, work engagement, resilience, Pressure to Publish, and workload. The independent variables were the five-level experience-groups variable (5 years or less, 6 to 15 years, 16 to 25 years, 26 to 35 years and more than 35 years), and two-level gender variables (female/male). Table 5.10 shows the means and standard deviations for emotional exhaustion, engagement, resilience, Pressure to Publish, and workload according to experience groups. The overall breakdown of means of the five variables according to experience groups is shown in Figure 5.

Table 5.10. Means and standard deviations for emotional exhaustion, engagement, resilience and Pressure to Publish and workload according to experience groups

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | N | Emotional  Exhaustion | | Engagement | | Resilience | | Pressure to  Publish | | Workload | |
|  | | *M* | *SD* | *M* | *SD* | *M* | *SD* | *M* | *SD* | *M* | *SD* |
| 5 years or less 196  6 to 15 years 322  16 to 25 years 114  26 to 35 years 37  More than 35 years 12 | | 18.78 11.87  17.31 11.35  16.10 10.80  15.86 13.69  12.42 13.10 | | 28.97 4.66  30.20 4.37  30.85 4.42  31.70 4.32  32.58 2.81 | | 51.82 5.77  53.43 5.63  53.74 5.59  55.57 5.60  57.92 3.68 | | 37.64 8.31  36.90 8.61  35.77 8.37  35.32 9.45  31.08 10.54 | | 15.19 3.58  15.23 3.64  15.33 3.69  14.35 2.93  12.00 3.02 | |

Figure 5. Means for emotional exhaustion, engagement, resilience, Pressure to Publish, and workload according to years of experience

**5.6.1 Experience-level differences**

From the sample of 681 academics (High burnout = 22.17%, Medium = 20.85%, Low burnout = 56.98 %) it was shown that university academics in the ‘5 years or less’ group reported higher levels of emotional exhaustion than those academics in the other more experienced groups (Table 5.10). It was also evident that those academics who had less experience in their career practically always had higher levels of Pressure to Publish, higher levels of perceived workload, lesser degrees of engagement, and also lower levels of resilience. Academics in this early stage group are at the stage in which they are focusing on their academic profession and eagerly striving to thrive in their teaching and research. Nonetheless, their academic skills have yet to be fully developed and, due to this, the emotions of these academic staff will become increasingly exhausted with diminishing work enthusiasm due to the increasingly heavy burden of academic workload, teaching, and research. During the early career stage junior employees may also be involved in many developmental tasks, e.g., adaptation to the organisation, learning the job, and pursuing their career goals. Simultaneously, they too have other personal tasks in their daily life and are at a turning point in their families and their places of work, including adjusting to the social role of parents or spouse, etc. (Qu, & Wang, 2015; Innanen, Tolvanen, & Salmela-Aro, 2014).

Having countless coinciding tasks at this stage of career may result in some young employees suffering burnout (Innanen et al., 2014). As age and years of academic experience increase, academic staff gradually enter a mature period in which their well-being and position will be enhanced and work experience has accumulated to a point that problems are better managed. As a result, the pressure and strain will likely reduce gradually over time.

Previous studies pertaining to burnout during early career exist across numerous sectors (Beltman, Mansfield, & Price, 2011; Cranley, Cunningham, & Panda., 2016; Dicke et al., 2014; Dunford, Shipp, Wayne Boss, Angermeier, & Boss, 2012; Dyrbye et al., 2014; Ferguson-Patrick, 2010; Kelly & Northrop, 2015; Schaefer, Long, & Jean Clandinin, 2012). Dunford et al. (2012) found that burnout is relatively more stable for employees who have worked for some years with a particular institution, whereas it was more draining for new employees. Interestingly, it has also been noted that the older and married individuals faced less burnout than younger and single professionals (Alacacioglu, Yavuzsen, Dirioz, Oztop, & Yilmaz, 2009). Tijdink, Vergouwen, and Smulders (2014) mention that early career stage aspects, e.g. younger in age, starting to build a family, and having fewer years since being appointed were seen to trigger the onset of burnout. For physicians, longer working hours during early career led to exhaustion (Cranley et al., 2016). According to Dyrbye et al. (2014) burnout seems to hit the highest point during early career or during the stage of training among physicians, in comparison to other occupational groups. When it came to educators, the inclination for teachers to exit the career earlier in the profession is mostly credited to the emotional toil of their workload (Packirisamy, Meenakshy, & Jagannathan, 2017). Teacher resilience, specifically during the beginning demanding years, is attributed to individual characteristics such as self-efficacy and the undivided organizational support received (Beltman et al., 2011).

On a related note, according to Maslach et al. (2001), of all the demographic variables that have been studied when it comes to burnout, age has been the one most consistently linked to burnout. It has been reported that the level of burnout is higher among younger employees. Age is also confounded with experience, hence burnout seems to be more of a risk during one’s early career stage than later (Maslach, et al. 2001). The reasons for such an interpretation have not been studied thoroughly (Maslach, et al. 2001), nevertheless, caution ought to be taken with these findings due to survival bias, that is, individuals who burn out earlier in their careers may have likely quit their jobs, leaving behind the survivors who consequently exhibit much lower degrees of burnout as reflected in the data (Maslach, et al. 2001), and may not appear among the group of more senior staff. The academics in this sample could also perhaps be from those academics who are more resilient, henceforth the reason why they have stayed and remained firm in the field and profession. When it comes to cohort differences, this also could be one reason as younger academics may be lacking resilience in comparison to their much senior colleagues. However, on the contradictory viewpoint, some would dispute that younger generations face much tougher early-career environments than older generations (Kwiek, 2017) and this will be further upon elaborated below.

Another factor worthy of being looked into in regards to these experience-level differences is the gap between younger and older academic generations, which Kwiek (2017) described as the dimensions of the intergenerational divide. This is where different academic generations have to cope with varying challenges and what is expected of them throughout their career. Having used Polish academics as samples, Kwiek states that not only are these academics divided generationally in terms of how they think, what they need to think about, and how they work, but also in terms of what is expected from them academically.

Similarly, if relating to what Kwiek states to the current sample, younger and older Malaysian academics were born to academic life in different periods, having to work with different career prospects and following different academic norms, which would without doubt enable them to develop different styles of coping when dealing with pressures and demands, despite the fact that they share similar experiences or receive similar exposure to such events that characterise their working life (e.g. burnout, demands of workload). These mutual experiences may mark each of the individuals quite uniquely, and as a result would cause them to tend to display variations in behaviour and intellectual abilities in reacting to such stressors (Schuster & Finkelstein, 2006). On the same note, Marquina and Jones (2015) affirm that different generations of academics may undergo and comprehend academic work in dissimilar ways, hence the different means of contending burnout.

From the MANOVA results we can also see a trend such that those who had more years of experience tend to be more engaged, more resilient, and less likely to report feelings of Pressure to Publish. Seasoned academics i.e. those in the ‘more than 35 years’ group, reported the least burnout and the least perceived workload in their career. This can be due to the fact that those academics in this group are also nearing or looking at retirement, do not have to prove themselves any longer, are more comfortable with their position, lack work stress, and have adapted far better to the demanding environment.

In regards to experience-level differences, the MANOVA revealed that a statistically significant result (p < 0.05) occurred only for the Engagement, F (4, 671) = 3.74; p < .05, and resilience scales, F (4, 671) = 6.36; p < .05 (See Table 5.12).

**5.6.2 Gender differences**

Table 5.11 shows the means and standard deviations for emotional exhaustion, engagement, resilience, Pressure to Publish, and workload according to gender groups. The overall breakdown of mean levels of performance on all the five subtests according to gender is illustrated in Figure 6.

Table 5.11. Means and standard deviations for emotional exhaustion, engagement, resilience, Pressure to Publish, and workload according to gender

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | N | Emotional  Exhaustion | | Engagement | | Resilience | | Pressure to  Publish | | Workload | |
|  | | M | SD | M | SD | M | SD | M | SD | M | SD |
| Male 222  Female 459 | | 15.49 11.91  18.27 11.35 | | 30.39 4.42  29.93 4.54 | | 53.50 5.80  53.07 5.71 | | 35.42 8.95  37.37 8.40 | | 14.67 3.36  15.35 3.70 | |

Figure 6. Means for emotional exhaustion, engagement, resilience, Pressure to Publish and workload according to gender

When it comes to gender comparisons, female academics tend to experience higher levels of burnout, Pressure to Publish, and workload than their male counterparts. This evidence suggests that female academics are more vulnerable to suffer burnout than male academics. In the literature, the demographic variable of gender has not been a clear-cut predictor of burnout, despite some opinions of burnout being more of a female experience (Maslach et al., 2001). Some factors may contribute to these gender differences, among which are that female academics may be less proficient when it comes to managing physical and mental stresses (Dale & Weinberg, 1990; Maslach & Goldberg, 1998). It must be noted that in the literature, physical and mental stresses are known to be the focal factors in the development of burnout (Dale & Weinberg, 1990; Maslach & Goldberg, 1998). One other significant factor is the fact that female academics have continuously been linked with conflicts of the work-life balance spectrum (Etzion & Pines, 1986), which may have led to feelings of failure, inadequacy, and diminished accomplishment among women academics in the workplace. The difference between rapidly growing expectations, demands, and outcomes is the main factor in the occurrence of burnout in men and women and this has also added to higher levels of perceived workload, as revealed in the above results due to the dual role demands and expectations of career women (Reddy, Vranda, Ahmed, Nirmala, & Siddaramu, 2010).

These gender differences related to burnout were also noted by Anitei, Chraif, and Ionita (2015) as well as by Etzion (as cited by Lee & Shin, 2005), who found that women tend to burn out more regularly than men across the professional board. Numerous factors that breed stress or stressors are usually psycho-social in nature (Rivera-Torres, Araque-Padilla, & Montero-Simo, 2013). When it comes to the structural differences in gender roles, duties, and responsibilities, and why women do not cope with stress, or at least do not do so as well as men, it is generally accepted in the literature that this is due to individuals responding differently to exposure to stressors. In other words, stress-related symptoms or illnesses can vary between individuals (Rivera-Torres et al., 2013). Thus, it is very important to consider gender when studying burnout-related problems, especially when it comes to the given climate in universities for women.

Research shows that occupational stress can affect both men and women equally; nevertheless, women may be unduly exposed to stressors compared with men (Rivera-Torres et al., 2013). Both genders are exposed to very diverse work surroundings and different types of burdens and tensions, even when working in the same profession and sector, whereby, men are expected to occupy much higher positions and may have it much easier than women (Rivera-Torres et al., 2013). Women, in comparison, have a higher tendency to work in low-paid jobs, have greater exposure to repetitive tasks, are less likely to be involve in problem solving or learning careers, less likely to be given the opportunity to when to take a break during work, and remain in a particular job longer than their male counterparts; all to which exposes women to more enduring risks, affecting their working conditions and also personal well-being (Gunkel, Lusk, Wolf, & Li, 2007; Rivera-Torres et al., 2013).

A review of past research suggests that gender does not necessarily influence all indicators of work-related stress. For example, no differences were found between women and men in terms of the effect of stress factors on perceived role conflicts (Wong, DeSantics, & Staudemayer, 2007), self-esteem (Gentile et al., 2009), or personal accomplishment (Proost, de Witte, de Witte, & Everts, 2004). Although the relation between burnout and gender aspects, in general, is still unclear, the majority of relevant studies identified have found that it is women who have experienced burnout more than men (Anitei et al., 2015; Etzion, & Pines, 1986; Linzer et al., 2002). These results could be associated with gender role stereotypes or institutional sexism, but they may also reveal the confounding of gender with certain professions (for example, the likelihood of police officers to be male, and the higher probability of nurses to be female) (Maslach et al., 2001).

Furthermore, women without doubt have the bigger majority share of unpaid work responsibilities at home, caring for children and family members, and so on, regardless of already having to work full-time jobs (European Agency for Safety and Health at Work, 2003). Not only do women devote far more extensive hours to household labour than men, this is on top of their daily paid work and generates even more stress or burnout, particularly when they are unable to feasibly bring together and balance work and family life (European Agency for Safety and Health at Work, 2003).

Adekola (2010) maintains that for women having husbands sharing the housework and family responsibilities and supporting their career development are less prone to burnout than those who do not have such assistance at home. This could, therefore, explain why women cope better with burnout than men in the long run when equally sharing domestic tasks within the family. Adekola (2010) further states that when married women are helped by their husbands in housework, errands, and family chores their emotional well-being, human contact, and interpersonal skills are strengthened. Research has also demonstrated that family life with all its responsibilities is not just a burden, but also a gratifying source that reinforces emotional comfort and abilities (Adekola, 2010). In the case of the Malaysian context, a reason on why many female particpants of this study reported high burnout could be due to most women being at a disadvantage at home as they are expected to play a larger role in domestic work as compared to men (Hirschman, 2016).

One other concept that has been examined in the burnout literature is “role strain”, and this has consistently found to be positively connected with worker burnout (Lois, 2006). Goode (1960) originally defined role strain as ‘difficulty in meeting given role demands’ (p. 485). When it comes to women, many experience strain between their primary occupation role and their supplementary roles as mother and homemaker, as well as their problematic emotions associated with their experiences in each role (Bernard, 2017; Lois, 2006). Bernard (2017) discussed the issue of role strain with regards to women physicians, where women find themselves juggling professional life with the additional roles of being a spouse and mother triggering a dominant clash between work-life balance. Bernard (2017) further states that while such an increase in burden on women physicians could also perhaps be due to the traditional societal gender roles expected of women, and with no assistance in household errands during the course of the day, women physicians would tend to commit hours after work, straining themselves to complete more errands at home which Bernard described as the “second shift” and is a very big contributor to burnout.

Bernard (2017) mentions that work-home conflict can be a major source of pressure for women physicians. Women often report a sense of duty to spend more time at home and make greater accommodations to their work schedule in order to manage household tasks than men (making it far easier for men), including making a career change to accommodate their spouse’s career or childcare responsibilities (Dyrbye, Shanafelt, Balch, Satele, & Freischlag, 2011; Robinson, 2003). Having to cope with a double workload, for instance, housework, childcare and a job, in the long-run will result in exhaustion among women (Adekola, 2010). This could perhaps be one of the numerous reasons why female academics experience more burnout than male academics within the current sample.

The difference between the two gender groups on the composite burnout score was the largest compared to the other variables, i.e. the mean score of male academics (M = 15.49, SD = 11.91) and female academics (M =18.27, SD = 11.35). Items that distinguished between the two groups in regards to this construct related to frustration towards the job, being fatigued, strained working relationships with others, and relentless work overload.

In regards to resilience, the mean item scores for the two groups were quite comparable, the mean score of male academics was (M = 53.50, SD = 4.82) and female academics was (M = 53.07, SD = 5.71) which indicates that resilience, when it comes to this population, does not appear to be a significant problem due to both groups scoring quite high in this subtest. This was a positive finding for the profession as a whole, as resilience can buffer and aid an individual for burnout, serving as a protective factor (Garcia & Calvo, 2012) and promotes the ability to bounce back following adversity and hardship (Wagnild & Young, 1993).

Regarding gender differences, Table 5.12 shows that the MANOVA revealed a statistically significant result (p < 0.05) occurred for the emotional exhaustion scales as well as the Pressure to Publish scale. This suggests that there seems to be an overall gender effect on burnout and Pressure to Publish, however not on the other scales.

Table 5.12. MANOVA Results for years of experience and gender in academics scores on the scales of emotional exhaustion, engagement, resilience, workload, and Pressure to Publish

|  |  |  |  |
| --- | --- | --- | --- |
| Scale | *F* | | |
| Gender | Years of Experience | Gender  x  Years of Experience |
| Emotional Exhaustion | 6.49\* | 1.55 | 1.37 |
| Engagement | 0.03 | 3.74\*\* | 1.23 |
| Resilience | 0.01 | 6.36\*\* | 0.47 |
| Pressure to Publish | 6.79\*\* | 1.56 | 1.58 |
| Workload | 2.50 | 1.36 | 1.48 |

\*p <0.05 \*\*p< 0.01

N = 681; 222 males, 459 females, 196 academics with 5 years or less, 322 academics with 6 to 15 years, 114 academics with 16 to 25 years, 37 academics with 26 to 35 years and 12 academics with more than 35 years.

The overall results from the MANOVA revealed no main effect for gender, λ = .98, F (5, 667) = 2.20, p = .05, but a significant effect for years of experience, λ = .94, F (20, 2213) = 1.99, p = .01, partial η2 = .02 as displayed in Table 5.13. Academics’ levels of burnout, work engagement, resilience, perceived workload, and Pressure to Publish are all significantly dependent on their years of experience (p < .05).

Table 5.13. MANOVA investigation of gender and years of experience in relation to the dependent variables of emotional exhaustion, engagement, resilience, workload, and Pressure to Publish

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Variable | MANOVA results, F | Df | *p* | Wilk’s Lambda | Partial eta Squared |
| Gender  Years of Experience | 2.20  1.99 | 5  20 | .05  .01\* | .98  .94 | .02  .02 |

**5.7 Confirmatory Factor Analysis**

To evaluate the measurement model for resilience and burnout-engagement in university academics, confirmatory factor analysis (CFA) was conducted on the group of factors with Mplus (Muthen & Muthen, 2010) using a maximum likelihood parameter estimate with standard errors and a mean-adjusted Chi-Square Test statistic (MLM), due to the non-normality of the data. The MLM Chi-Square Test statistic is also known as the Satorra-Bentler Chi-Square. Whenever robust parameter estimation is used, Chi-Square difference tests between nested models are inappropriate because the Chi-Square is not distributed as Chi-Square. Hence, it can be conducted using the correction formula (Satorra & Bentler, 2001). CFA was conducted to test the hypotheses of the study to see whether relationships between observed variables and their underlying latent constructs existed as well as to examine links between specific items and the association between factors.

The goodness-of-fit of the models in this study was evaluated by fit indices i.e. the Chi-Square Test, root mean square error of approximation (RMSEA), standardised root mean square residual (SRMR), comparative fit index (CFI), and the Tucker-Lewis fit index (TLI). The measurement model specified the five constructs, i.e. Emotional Exhaustion (burnout), resilience, workload, engagement, and Pressure to Publish. In the next step, a theoretical model by means of SEM was tested where years of experience of the academics were also added.

**5.8 Results and Discussion**

**5.8.1 Confirmatory factor analysis**

A 5-factor confirmatory factor analysis (CFA) was conducted using the statistical package Mplus on the Malaysian university academics sample (n = 681). This CFA model included 39 items (6 engagement items, 8 emotional exhaustion items, 9 resilience items, 5 workload items, and 11 Pressure to Publish items). The fit statistics for the 39 item, 5 factor CFA indicated that the data did not fit the model well (RMSEA = .07, CFI = .81, TLI = .79, SRMR = .07, χ2 (692) = 3126.32, p < .001), as shown in Table 5.14. For the relative Chi-Square, also called the normed Chi-Square (χ2/df), the value was 4.52, less than the cut-off value of 3.0 and did not meet the model-fit criteria (<3.0) as suggested by Bagozzi and Yi (1988). The criterion for acceptance varies across researchers, ranging from less than 2 (Ullman, 2001) to less than 5 (Schumacker & Lomax, 2004). Having determined the inadequate fit of the hypothesised model to the sample data, it is reasonable to attempt to modify this model.

Table 5.14. Mplus output for model 1: Selected goodness-of-fit statistics and model results

Tests of Model Fit

**Chi-Square Test of Model Fit**

Chi-square value 3126.32

df 692

χ2/df 4.518

*p*-value 0.0000

Scaling Correction Factor for MLM 1.183

**CFI/TLI**

CFI 0.807

TLI 0.793

**Root Mean Square Error of Approximation (RMSEA)**

Estimate 0.072

**Standardised Root Mean Square Residual (SRMR)**

Value 0.065

A look at the factor loadings, five items (i.e. ETS2, RSA6, PPTOT11, AWS2 and AWS5) fell under the 0.40 mark of the acceptable internal consistency recommended by Raykov and Marcoulides (2010). Hence, these five items were removed after the initial CFA. The remaining items showed good reliability values with Cronbach’s alpha values ranging from .46 to .89. Upon deletion of the relevant weak factor loadings, the revised model (i.e. Model 2) showed improved fit (χ2 (517) = 2457.65, p < 0.001, RMSEA = .07, CFI = .83, TLI = .82, SRMR = .06). Factor loadings for the CFA are presented in Table 5.16. Factor loadings ranged from weak, moderate, to strong. To improve the fit statistics, the re-specification of this second model involved the checking of the modification indices for a better fit. A review of the Modification Indices (MIs) revealed six parameters (residual covariance), having the largest MI. Hence, in building Model 3, it is reasonable to attempt first to add to the model the residual covariance having the largest MI.

The incorporation of the eight newly specified residual covariance, significantly improved the fit, and showed an acceptable fit for Model 3 (χ2 (509) = 1251.67, p < 0.001, RMSEA = .05, CFI =. 94, TLI =. 93, SRMR = .06) (shown in Table 5.15 below). All CFI value of 0.94, TLI value of 0.93, RMSEA value of 0.05 and SRMR value of 0.06 met acceptable standards and represents a reasonable well-fitting model (Byrne, 1994; Hu & Bentler, 1999; Kline, 2011). Normed Chi-Square (χ2/df) too, was = 2.46, meeting the model-fit criteria (<3.0). Data is run and the results show the hypothesised SEM model fits the data relatively well. Thus, these findings stand in favour of allowing this third model to serve as the final model of the Resilience and Burnout-Engagement structure.

Table 5.15. Mplus output for final model 3: Selected goodness-of-fit statistics and model results

Tests of Model Fit

**Chi-Square Test of Model Fit**

Value 1251.671

Degrees of freedom 509

χ2/df 2.459

p-value 0.0000

Scaling Correction Factor for MLM 1.192

**CFI/TLI**

CFI 0.935

TLI 0.928

**Root Mean Square Error of Approximation (RMSEA)**

Estimate 0.046

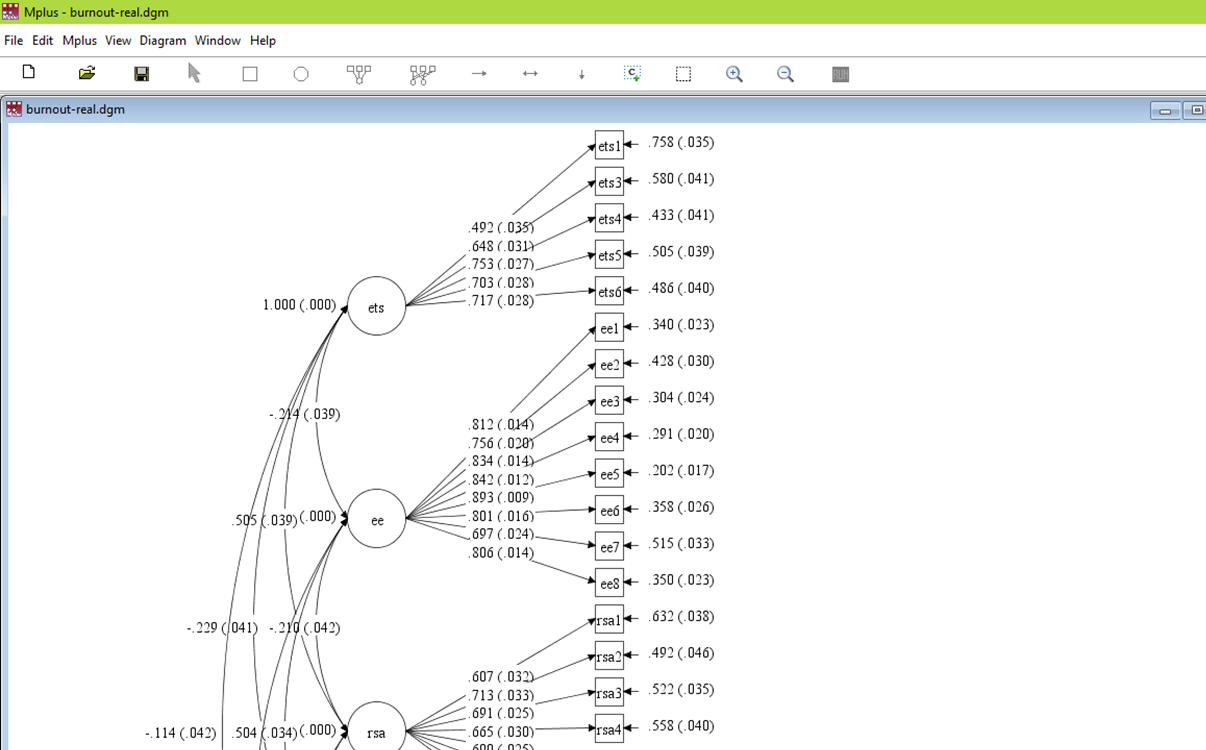
**Standardised Root Mean Square Residual (SRMR)**

Value 0.060

Through this CFA procedure, a total of five items were dropped based on the assessment of psychometric properties and theoretical relevance of those items. The instrument was 34 items altogether: eight items for Emotional Exhaustion, five items for engagement, three items for workload, eight items for resilience, and ten items for Pressure to Publish, as depicted below.

Table 5.16. Summary results for measurement model of resilience and burnout-engagement for Malaysian university academics

|  |  |  |
| --- | --- | --- |
| Factors and items | λ | α |
| Engagement (ETS) |  | .80 |
| While teaching I pay a lot of attention to my work. | 0.49 |  |
| I find teaching fun. | 0.65 |  |
| In class, I care about the problems of my students. | 0.75 |  |
| While teaching, I work with intensity. | 0.70 |  |
| In class, I am empathetic towards my students. | 0.72 |  |
| Emotional Exhaustion (EE) |  | .94 |
| I feel emotionally drained from my work. | 0.81 |  |
| I feel used up at the end of the day. | 0.76 |  |
| I feel fatigued when I get up in the morning and have to face another day on the job. | 0.83 |  |
| Working with people all day is really a strain for me. | 0.84 |  |
| I feel burned out from my work. | 0.89 |  |
| I feel frustrated by my job. | 0.80 |  |
| I feel I am working too hard on my job. | 0.70 |  |
| Working with people directly puts too much stress on me. | 0.81 |  |
| Resilience (RSA) |  | .83 |
| I feel that I can handle many things at a time. | 0.61 |  |
| I am determined. | 0.71 |  |
| I can get through difficult times because I’ve experienced difficulty before. | 0.69 |  |
| I have self-discipline. | 0.67 |  |
| I keep interested in things. | 0.69 |  |
| My belief in myself gets me through hard times. | 0.60 |  |
| In an emergency, I’m someone people can generally rely on. | 0.54 |  |
| My life has meaning. | 0.52 |  |
| Workload (AWS) |  | .70 |
| I do not have enough time to do the work that must be done. | 0.80 |  |
| My work takes me away from my personal interests. | 0.46 |  |
| I do not have enough time to do what’s important in my job. | 0.84 |  |
| Pressure to Publish (PPTOT) (*I feel Pressure to Publish*…) |  | .92 |
| Articles in peer-reviewed journals. | 0.69 |  |
| Articles in editorially reviewed journals. | 0.74 |  |
| Scholarly books. | 0.86 |  |
| Textbooks.  Chapters in books. | 0.83  0.88 |  |
| Case studies. | 0.79 |  |
| From my department chair. | 0.71 |  |
| From my university’s central administration. | 0.66 |  |
| From colleagues at my university. | 0.61 |  |
| From colleagues at other universities. | 0.57 |  |
|  |  |  |



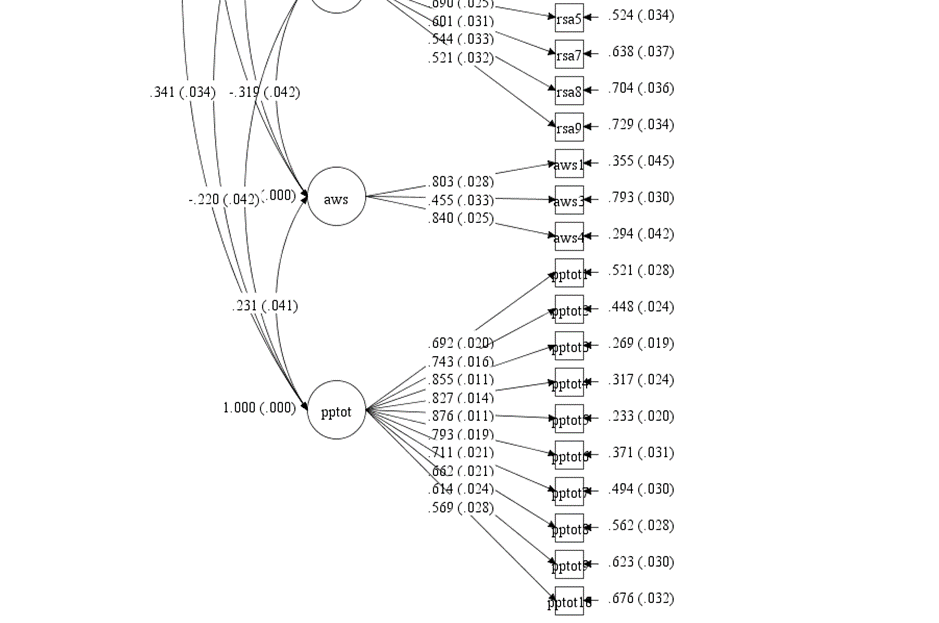


Figure 7. CFA Final model of resilience and burnout-engagement for Malaysian university academics

Note. AWS = Workload; PPTOT = Pressure to Publish; RSA = Resilience; EE = Emotional Exhaustion (Burnout); ETS = Engagement.

**5.8.2 Structural equation modelling (SEM)**

As the validity and reliability of variables were not challenged, analysis of the data proceeded to the SEM model fit. According to Kenny (2015), the goal is for the sample size to be 200 or over in SEM research. For this study, the sample size is, N = 681, serving the required sample size for SEM analysis. Model fit refers to the extent the hypothesised model is consistent with the data (Byrne, 2012). In SEM analysis, the closer the estimated covariance matrix gets to the sample/data covariance matrix, the better the model fits (Byrne, 2012). The SEM analysis for this study followed the method suggested by Byrne (2012). Determining the best fitting model is the first step, followed by the most parsimonious one. Upon establishing the final model, any non-significant parameters are hence deleted.

***5.8.2.1 Structural model***

Now that a best-fitting substantively, appropriate measurement model has been established, the input file for the initial hypothesised model is created. All 34 observed variables for this study are listed with an addition of ‘years of experience’ referring to the number of years the academics have been in academia.

Years of Experience

YEARX

EE4

EE6

EE1

EE5

EE8

EE7

EE3

EE2

ETS5

ETS1

ETS6

ETS4

ETS3

RSA4

RSA7

RSA1

RSA5

RSA9

RSA3

RSA2

RSA9

PPTOT7

PPTOT10

PPTOT3

PPTOT8

PPTOT9

PPTOT2

PPTOT5

PPTOT4

PPTOT1

PPTOT6

AWS1

AWS4

AWS3

Figure 8. Hypothesised SEM Model of resilience and burnout-engagement for Malaysian university academic

The hypothesised SEM model of resilience and burnout-engagement for Malaysian university academics is depicted in Figure 8. The initial model shows an acceptable fit. Specifically, the CFI and TLI statistics met acceptable standards. The Chi Square statistic, MLM χ2 [541] = 1537.948, CFI = 0.923, TLI = 0.915, and RMSEA = 0.052 and SRMR = 0.061, indicates an acceptable fit. For a better fit, however, modifications of the original model were attempted. Modifications of the model are necessary but require theoretical support (Loehlin, 2004; Long, 1983). In addition, the fewer modifications, the better. Modifications of the initial model were informed by the modification indices provided by Mplus.

The indices suggested that if items of engagement, (ets6) and (ets1) were allowed to correlate with one another, the same goes with items of (ets6) and (ets3), items of (ets4) and (ets1) and (ets3) with (ets1), a better fit will be achieved, due to these pairs being highly correlated. Theoretically, the modifications were reasonable. Therefore, these pairs of constructs were allowed to correlate.

The second model displayed improved fit. Both CFI and TLI improved to 0.941 and 0.935. RMSEA also showed an improved value while SRMR remained the same (CFI= 0.941, TLI = 0.935, RMSEA = 0.046, SRMR= 0.060, MLM χ2 [537] = 154.196. Based on these results, the model was reviewed again to refine this second model.

The addition of five newly added paths (as suggested by Mplus) in regards to resilience items (rsa5) with (rsa4), (rsa3) with (rsa2), and Pressure to Publish items (pptot8) with (pptot1), (pptot8) with (pptot2) and (pptot3) with (pptot2) led to a statistically significant improvement of the model with CFI = 0.950 and TLI = 0.944, indicating a reasonably good fit of the third model in the sample. Reported values of both RMSEA (0.042) and SRMR (0.059) also provided additional support in this regard. This third model thus served as the final model of Resilience and Burnout-Engagement for Malaysian university academics. The fit indices for models are summarised in Table 5.17. To discriminate between significantly better fitting models the χ2 difference test for the Satorra-Bentler scaled χ2 were used. The MLM method estimates the Satorra-Bentler scaled χ2 and a scaling correction factor instead of the regular χ2 (Byrne, 2012) as mentioned previously. The third and final model was found to be significantly better than that of the previous two models: MLM χ2 [532] = 71.419, p < 0.001.

Table 5.17. The fit of the resilience and burnout-engagement model, including (N=681)

Model χ2 Df CFI TLI RMSEA SRMR

Initial model 1537.948 541 .92 .92 .05 .06

Second model 154.196 537 .94 .94 .05 .06

Final model 71.419 532 .95 .94 .04 .06

Note. RMSEA = Root Mean Square Error of Approximation; CFI = Comparative Fit Index; TLI = Tucker-Lewis Index; SRMR = Standardised Root Mean Square Residual

0.82

0.82

-.06

.99\*

.23\*

-.02

-.03\*

.02

.46\*

0.54

0.59

0.61

0.68

0.91

0.68

0.62

0.54

0.57

0.62

0.66

0.63

0.66

0.68

0.61

0.81

0.46

0.84

0.70

0.78

0.81

0.91

0.80

0.82

0.74

0.81

0.76

0.72

0.78

0.70

0.63

Years of Experience

YEARX

EE4

EE6

EE1

EE5

EE8

EE7

EE3

EE2

ETS5

ETS1

ETS6

ETS4

ETS3

RSA4

RSA7

RSA1

RSA5

RSA8

RSA3

RSA2

RSA9

PPTOT7

PPTOT10

PPTOT3

PPTOT8

PPTOT9

PPTOT2

PPTOT5

PPTOT4

PPTOT1

PPTOT6

AWS1

AWS4

AWS3

0.83

Figure 9. Structural equation model of resilience and burnout-engagement for Malaysian university academics (Mplus standardised estimates)

**5.9 Outcomes of the Study**

Figure 9 presents the results of the parameter estimation of relating variables to their latent constructs consisting of emotional exhaustion (burnout), work engagement, resilience, workload, and Pressure to Publish. The arrows from a latent factor to its indicator serve as factor loadings. For example, the arrow from emotional exhaustion (EE) to item EE5 with .91 attached on the arrow means that of all the eight indicators for emotional exhaustion, item EE5 (“I feel burned out from my work”) measures burnout best. On the other hand, the arrows from one latent factor to another indicate regression weights. For example, a change in one standardised unit in workload (AWS) will lead to .46 standardised unit changes in burnout (EE) (refer to Figure 9 above).

Looking at the final model, both workload and Pressure to Publish were significant predictors of burnout. Paths between burnout and academics’ workload and Pressure to Publish were also in accordance with the expected directions. Workload was the largest determinant of burnout among academics (.46), followed by Pressure to Publish (.23), and resilience or the lack of it had a lesser influence on burnout (-.02). For workload, academics reporting a high level of perceived workload correspondingly reported a higher level of burnout in support of Hypothesis 3. The same goes for Pressure to Publish. A positive relationship was found for academics’ levels of burnout with perceived feelings of Pressure to Publish, demonstrating that the higher the perceived feelings of Pressure to Publish among academics, the greater the burnout, thus, confirming Hypothesis 2 of the study.

Findings from this study also show that higher levels of resilience were associated with lower levels of emotional exhaustion among academics. This indicates a direct negative link between the two constructs respectively and supports the study hypothesis that higher levels of resilience in academics were related to diminishing levels of feeling emotionally exhausted (burning out) (Hypothesis 4a). This association is nevertheless weak.

For the relationship between resilience and engagement, the model supported the notion that resilience had a direct positive effect on work engagement, supporting the hypothesis that the more resilience an academic has, the more engaged they are in their career (H4b). The resilience item (“I am determined”) had the most effect (.68), whereby the item of (“My life has meaning”) had the least effect (.54). From the model, a non-significant relationship was revealed between resilience and engagement (.02).

Burnout with engagement, on the other hand, revealed a significant relationship in the theoretically expected direction (-.03) indicating that these two variables negatively influence one another. As true to the hypothesised model, the model exhibited that academics experiencing a higher level of burnout will report lower levels of engagement, hence the inverse relationship. Thus, this finding is consistent in support of Hypothesis 1.

When it comes to years of experience, the link between years of experience and engagement is strong, that is (.99) demonstrating a positive significant relationship which implies the more years of experience an academic has, the more he or she will express work engagement. This is in accordance with the researcher’s expectations and in line with Hypothesis 5a. On the contrary, the effect of years of experience on emotional exhaustion was not a significant one (-.06). Nonetheless, as predicted, this relationship showed an inverse link depicting that academics having a higher burnout rate were those belonging to the groups with fewer years of experiences (Hypothesis 5b), which in turn, shows that these academics would correspondingly exhibit a lower level of engagement towards their work. The total effect between years of experience and engagement was revealed to be the largest of all the other variables in the model.

For years of experience and resilience, the final model displayed a moderate positive association between the two constructs (.45), demonstrating that the more experience academics have in academia, the more resilient they are. For years of experience and Pressure to Publish a negative relationship was found (-.09), denoting that the longer academics have been in their academic career, the less they experienced feelings of Pressure to Publish. Both of these relationships corresponded with Hypothesis 5c and Hypothesis 5d of the study, respectively.

For the mediation, results provided some evidence for the mediating effects of burnout. Findings from the final model inspection of the Mplus-output revealed that resilience was no longer a significant predictor with the mediator burnout in the model. The path from resilience to engagement was nonsignificant, whereas the direct path from burnout to engagement was significant. It was shown that burnout affects engagement (i.e. the outcome variable). This indicates that burnout mediated the relationship between resilience and work engagement in this population of academics (-.03); therefore Hypothesis 4c was supported.

Grounded by theoretical and empirical literature, it was postulated that burnout mediates the relationship between resilience and engagement. Though it is mentioned in past literature that high job resources (resilience) have led to engagement, little is known about how job resources result in increased work engagement (Bakker, Van Emmerik, & Van Riet, 2008; Hakanen, Schaufeli, & Ahola, 2008; Schaufeli et al., 2009). Findings from this study show that high resilience leads to work engagement by reducing burnout (the mediator) or, in other words, when there is a lack of resilience for academics to be in a state of engagement in their work (the outcome) burnout would, therefore, need to be reduced. Similarly, other studies have also found that burnout mediates the relationship between resilience (or other job resources) and engagement, respectively (Hakanen et al., 2006; Roslan, Ho, Ng, & Sambasivan, 2015).

In regards to items, for workload, item AWS4 (“I do not have enough time to do what’s important in my job”) contributed the most to the workload construct (.84). Another strong contributor for the workload is item AWS1 (“I do not have enough time to do the work that must be done”) (.81). The weakest contributor is item AWS3 (“My work takes me away from my personal interests”) (.46). For the Pressure to Publish construct, PPTOT5 (“I feel Pressure to Publish: - Chapters in books”) was the highest contributor (.91). Followed closely by organisation PPTOT6 (“I feel Pressure to Publish: - Case studies”) (.83).

Emotional exhaustion, on the other hand, is best measured by the item “I feel burned out from my work” (.91) followed by “I feel fatigued when I get up in the morning and have to face another day on the job” (.82), and “I feel frustrated by my job” (.69). Item EE7 “I feel I am working too hard on my job” was the lowest contributor to burnout, with .70.

When it comes to academics’ level of work engagement item ETS4 was the highest contributor, i.e., “In class, I care about the problems of my students” (.78), closely followed by item ETS6 “In class, I am empathetic towards my students” (.76). The engagement item “While teaching I pay a lot of attention to my work” (ETS1) had the least influence on the construct, with .63.

Overall, workload and Pressure to Publish were the only two constructs having a significant influence on burnout, with workload (.46) and Pressure to Publish (.23). Both constructs show a positive link with burnout, supporting the study hypothesis that the more academics experience a high level of perceived workload, the higher the reported burnout. Likewise, academics experiencing a high level of perceived Pressure to Publish reported higher burnout. Resilience, on the other hand, had an insignificant influence on burnout. The results of all the hypotheses of this study are thus summarised in Table 5.18.

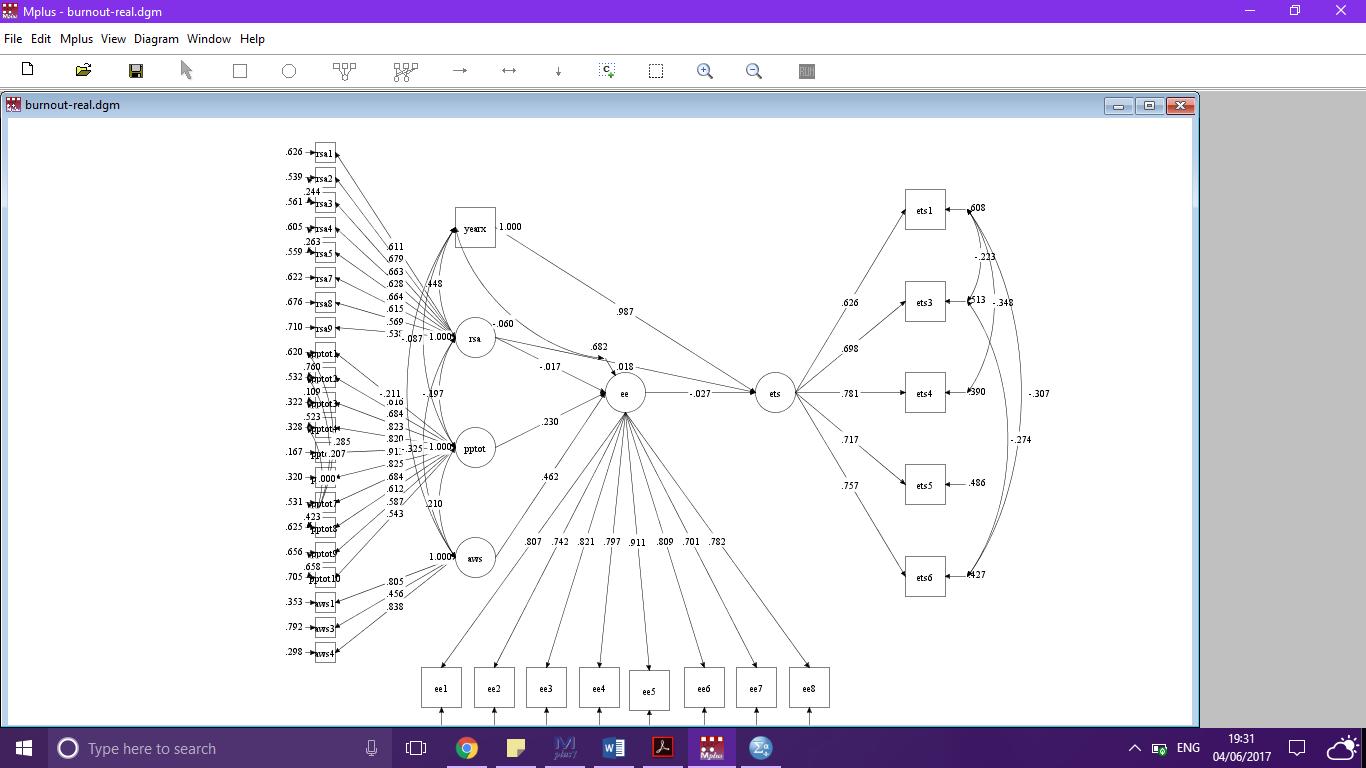


Figure 10.Diagram of the final model of resilience and burnout-engagement for Malaysian university academics

**5.10 Results of the Hypotheses of the Study**

Table 5.18 below depict the results for all the hypotheses of this study. Based on the findings, all hypotheses were hence supported.

Table 5.18. Hypotheses results

|  |  |  |
| --- | --- | --- |
| No | Hypothesis | Results |
| H1 | Burnout is negatively correlated with engagement; academics who experience a high level of burnout will report lower levels of engagement. | Supported |
| H2 | There is a positive relationship between academics’ levels of burnout with perceived feelings of Pressure to Publish. | Supported |
| H3 | Workload is positively correlated with burnout; academics who experience a high level of perceived workload will report higher levels of burnout. | Supported |
| H4a | Academics’ levels of burnout have a negative relationship with their resiliency levels. | Supported |
| H4b | Academics’ levels of resilience have a positive relationship with their engagement levels. | Supported |
| H4c | Resilience is related to work engagement through burnout. In other words, burnout partly mediates the relationship between resilience and work engagement. | Supported |
| H5a | Years of experience is positively correlated with work engagement; that is, the more years of experience an academic has, the more he/she will express work engagement. | Supported |
| H5b | Years of experience is negatively correlated with burnout; whereby the more years of experience an academic has, the less likely he/she will report feelings of burning out. | Supported |
| H5c | Years of experience is negatively correlated with Pressure to Publish; that is, the more experiences an academic has, the less likely he/she will report feelings of Pressure to Publish. | Supported |
| H5d | Years of experience is positively correlated with resilience; that is, the more years of experience an academic has, the more likely he/she will express resiliency. | Supported |

**Chapter Six: Qualitative Findings from the Data**

**6.1 Introduction**

Stage 2 of the study was aimed at describing Malaysian university academics’ narrated experiences of burnout in their everyday work at their respective workplaces i.e. universities. In addition, this stage of the research was conducted to explore the meaning of the experience of burnout and work engagement in addition to analysing any change in the levels of these variables among academics’ during the course of one semester.

**6.2 Data from interviews**

A summary of the relationship between themes derived from Time point 1 until Time point 3 is illustrated below.

A one month gap period between each of the time points was allocated.

**T1**

Eight Themes (33 Subthemes)

* Depiction of academics telltale signs of burnout
* Triggers of burnout among academics
* Coping mechanisms against burnout
* Thoughts of bringing work home
* The love of being an academic
* On being resilient and surviving burnout and other challenges
* Effect of burnout phases on participants
* Factors that trigger stress

**T2**

Four Themes: (8 Subthemes)

* Illustration of the more negative aspects of the career
* Getting away to cope with burnout
* Indication of an adaptation process among academics
* Relentless attitude and continual grit

**T3**

Three Themes: (8 Subthemes)

* Evidence of emotional trouble and exhaustion still existing and burnout levels not reducing
* Indication of an adaptation process among participants
* Academics showing positive enthusiasm despite facing difficult times

Figure 11. Relationship between time points and the components of the main themes emerging from the qualitative phase of the study

**6.3 First Data Collection Stage (Time point 1)**

For all Time points, analysis of findings was carried out independently. Generally, this first time point was aimed at examining episodes of burnout experienced by academics at the very start of the semester. In this opening data collection stage, questions were more directed towards exploring how academics defined their personal experiences on the job, the university setting they worked in, their perceived burnout levels at this specific point of time, and so on. This time point resulted in more themes than in the other time points due to the “core questions” being asked only during this stage (see Appendix C: Burnout Interview Guide) and not in the subsequent stages. The first stage of data collection yielded eight key themes emerging from the analysis.

**6.3.1 Theme T1.1: Depiction of academics’ tell-tale signs of burnout**

The tell-tale signs of burnout were clearly portrayed by some participants in the sample during the first stage of the interview. The first being academics mentioning experiencing and feeling emotionally drained by work. Some were to the extent of being emotionally exhausted when even thinking about their workplace and supervisors. It was not only academics in the High burnout group who expressed such feelings, but also those from the Medium and Low burnout groups. One participant discussed how she felt emotionally exhausted, lacked energy, and felt drained due to difficulty working with her boss,

There are times that I find it very difficult to go to work, it’s emotionally exhausting. Most of the time, it’s because of my superior. Yesterday she was on leave so everyone was having a ‘party’, even though classes were still going on. (Female, H5 T1)

Two participants describe the academic career as being extremely demanding,

Yes of course I’m exhausted…it’s too challenging. Every day I have that feeling of tiredness. (Male, L2 T1)

Actually this is the hardest working experience I’ve ever had. The most challenging and the most tiring! (Female, H4 T1)

Several participants also expressed feeling dread for what lies ahead every morning, not looking forward to their job, and on some occasions having to drag themselves to the office. This, to some degree, highlights the struggles academics faced to go to work suggesting symptoms of burnout, as further commented below,

Sometimes on Mondays, I feel like I’m dragging myself. Every day I really look forward to going back home. (Female, M2 T1)

Participants also exhibited signs of giving up and seemingly losing hope in their career, indicating another tell-tale sign of burnout, as such,

Last year I faced a burnout phase where I just wanted to leave. That’s when I started to apply for another job but eventually the habituation factor came. (Female, H5 T1)

That time, I couldn’t see lights at the end of the tunnel. (Female, H1 T1)

Anger was another sign of being exhausted with work as revealed by one respondent during the first interview stage. This may at first, be present due to interpersonal tension and irritability. In later stages however, this could turn into angry outbursts at home and perhaps at the workplace as well. Participants in this sample nevertheless, did not display anger to the point where it turned to acts of violence towards family members or colleagues and was raised by only one participant with the growing workload she kept receiving,

My husband and my son really noticed it. When I come home, I’ll be really exhausted and I’ll sleep early. Around 9 pm, I’m already flat. I always get angry too. (Female, M2 T1)

For Theme 1, as mentioned before, not only were academics in the High burnout cluster depicting signs indicative of burnout and exhaustion from their work, academics from the Medium and Low burnout cohorts also illustrated these tell-tale warnings of burnout and this will be deliberated upon further in detail in the following discussion chapter.

**6.3.2 Theme T1.2: Triggers of burnout among academics**

The triggers of burnout among academics emerging in this study ranged from the shortage of resources provided by institutions, mishandled evaluations or promotions, the lack of social support from superiors, workload mismatch, overwhelming job demands, and more as explained as follows:

***i) Lack of Appropriate Resources***

The lack of appropriate teaching resources and their availability was clearly identified by all participants as one very important trigger of burnout. Whilst most participants expressed the desire to perform, they were unable to do so due to this issue. To perform a job effectively, academics felt the need to have appropriate training, equipment, and resources. Stress and burnout may result from the lack of these resources.

Respondents in this sample explicitly identified the importance of training and adequate resources to execute the job effectively, some even expressed their frustrations over management failing to send staff to needed training,

You’re setting up high KPI (Key Performance Indicators) for lecturers but you don’t provide the necessary resources and you don’t even send them for any training whatsoever. (Female, H1 T1)

Some participants were also perhaps more realistically concerned and stressed out regarding the inadequacy of resources due to the demands of publishing and research expected of them from the university,

They make us do research and publications, but they don’t support us in terms of finances. Sometimes we even have to use our own money to publish. (Male, L2 T1)

Of course I feel the pressure because you have to publish, you have to do research. But at the same time you’re not provided with the resources. I just do simple research because we don’t have the high-tech technology. (Female, H1 T1)

Another respondent suggested that universities ought to help academics deal with increasing workloads, by giving the necessary support and adequate time for them to actually focus,

Of course you have to do research to move on in the academic field but it has to come with financial support, enough resources. You also have to give time to people to focus. (Male, L2 T1)

Many respondents also conveyed their annoyance and anger that basic teaching necessities and other supplies were not adequately provided for them to engage in their work,

It’s the basic needs of an institution. If you’d like to give a lecture, you need equipment…projector...laptop. If the university fails to prepare this, it can demotivate the staff and give impact to the whole process of teaching. (Female, M1 T1)

One participant identified the need to buy her own equipment to get her job done. She was also displeased and extremely upset about how university management conducted certain events in lavish venues and allotted funds to things that were not necessary,

I have to buy my own printer. Laser printers aren’t cheap. The office toner has already been gone for a few months. Where did all the money go?! The top management said the budget has been cut from the federal government, but they still do events in 5-star hotels! (Female, H1 T1)

While another academic expressed that the lack in resources overwhelms her in some way or form,

I feel overwhelmed with the current situation of the university, with the lack of a lot of resources. These can hinder a lot of things, including your patience in teaching. Workplace factors contributes a lot to my burnout…the working environment, limited assets, the demands. (Female, M1 T1)

***ii) Unfairness – unfit workload or pay, assessments or promotions that are managed inappropriately***

Another trigger for burnout among academics in the sample were unfairness, particularly when it came to unequal treatment given to some individuals. Rigid performance evaluations was also raised by one respondent, where she recognised that such factors were the roots of her burnout levels activating,

I’m very frustrated with our SKT (Annual Performance Target) and LNPT (Annual Performance Evaluation Report). Some of my friends, even I cannot achieve 80%, let alone above 80%. If the boss favours you, he’ll increase your marks! (Female, H1 T1).

Mishandled promotions and staff performance awards not based on proper merit were also a practice at one university,

Those that are supposed to get promoted are not promoted and these two deans they are practicing what we call …cronyism. If they like you, then you can get whatever you want easily. (Female, H1 T1)

***iii) Lack of social support from superiors in addition to supervisory conflict that triggers burnout***

The lack of support given by superiors and supervisory conflict that elicits burnout was frequently brought up by respondents. Having a poor relationship with supervisors and bosses were also a subtheme of this area, as revealed below,

The idea of going to work every day is really stressful due to my Head. I find it stressful dealing with people without knowing what their expectations are. Usually my boss would shout in our faces if she’s not satisfied. Can you just imagine working with her every day?! (Female, H5 T1)

***iv) The effect of holding multiple roles and conflicting job demands on burnout***

Several participants also reflected that being overloaded with work or having to execute additional job duties (which mostly include administrative tasks) triggered their levels of burnout,

One event that led to my burnout: I was the only Academic Advisor at that time. People would blame me if anything happened. I had to make sure everything was running perfectly and being a perfectionist that made it even worst! (Male, L4 T1)

Some respondents also voiced strains regarding the dual nature of roles they have to carry, and conflicting job burdens, i.e. juggling between the demanding roles of being an academic and parent,

During the first months after giving birth, I’ve to send my son to school, rush to work, send my baby to childcare, start my classes and right after that, pick up my baby, go home, cook, and so forth. Because of that I felt really burned out. (Female, M2 T1)

***v) Job demands – overwhelming job demands or overload***

Several respondents, typically those from the High burnout group pointed to and blamed heavy workload for their burnout meltdown,

We have to go to meetings, prepare for class and when you’re not done with the syllabus, they’ll ask you to prepare for the final test. Sometimes I feel I just want to bang my head on the wall! (Female, H4 T1)

A comment was also made in regards to the lack of teaching staff available to cater to the overwhelming number of subjects offered:

I don’t know how somebody who teaches five or four different subjects can cope with writing articles at the same time. That’s a big workload! We just have too many subjects and not enough lecturers. (Female, H2 T1)

One respondent from the Low burnout group, when asked about stressors at the workplace and the daily demands of work indicated the overwhelming workload was a contributing precursor to his burnout,

Sometimes you feel the burden. This week someone asks you to go to this course. The following week you have to prepare questions for that foundation programme. It’s good for your KPI but it’s mentally exhausting. I enjoy teaching but not all this additional work. (Male, L2 T1)

Another participant from the High burnout group commented on her long hours at the office having to deal with hefty workloads,

Every day is filled with everything. In fact, I usually come early to the office. I’ll be the first person to arrive and I’ll be the last to leave. It’s very challenging. (Female, H5 T1)

***vi) Unreasonable demands and expectations by university management and superiors***

Demands by institutions was also reported at several instances during Time point 1 (T1) and were often seen as a trigger of burnout for a number of academics,

Being a research university, you need three to four ISI or Scopus journals per year. So it’s really demanding especially when the publishing process requires you to plan. (Female, H6 T1)

The demands and expectations of the university especially for those holding a Doctoral Title was also raised by one academic,

The Dean has high hopes of people with this doctorate title to be able to do anything. Once you have the doctor title, people expect you can’t fail in anything. (Female, H2 T1)

***vii) High expectations of oneself and unrealistic beliefs***

One academic also identified his occasional unrealistic expectations of himself and of not being able to let go of perfection, which fosters his burnout, while in reality, there is always some room for error,

I used to believe I should be a perfectionist, but I think I should tone down. I get stressed out every single time I feel that I didn’t give my best. I have these very high standards. (Male, L4 T1)

***viii) Student problems and demands***

Two participants from each of the High and Low burnout group acknowledged student demands as triggers for them burning out as some of them asserted,

Attitude problems such as not waking up early for 9 am classes, absenteeism - I try not to get angry with them. If I do, I’ll lose my mood for the whole class. (Female, H2 T1)

My aim is I want to make sure my students get the best out of my lecture. I’d really feel down if my students gave me that ‘look’ that they’re not happy. (Male, L4 T1)

***ix) Conflict between values***

A comment was made by one academic about the culture of meetings at her university that goes against her own values and an indication of activating potential burnout,

There seems to be a culture of meetings in this faculty. There are meetings almost three times a week. Nothing to discuss but everyone rambles on and on. I’d rather work smart than have a lot of meetings, but meetings here are a sign of you doing work. (Female, H2 T1)

During Time point 1 it was not unexpected that many academics expressed quite a number of factors triggering their burnout phases. Although some of the triggers were in reality internal or were activated due to or by the individual’s own disposition and nature a majority of factors conveyed were in fact instigated by exterior aspects; among which were the environment, institutional and external demands, along with interaction with others.

**6.3.3 Theme T1.3: Coping mechanisms against burnout**

A wide range of coping strategies and skills were expressed by participants in this first interview. Some were quick to express their need of assistance and support from those around them to endure their series of burnout, whereas a few others spoke of their independence in withstanding through stressful circumstances. This was done by means of engaging in activities like sports, getting away and distancing themselves from work and having a positive outlook towards things, as elaborated upon in the following narratives.

***i) Strong communication, social support from colleagues and co-workers and a good, supportive work environment***

Regarding coping mechanisms against burnout, the most popular response category reported by all groups (n = 3, High burnout group; n = 2, Middle group and n = 3 from the Low burnout group) identified conversing about a stressful event or burnout phase with a supportive person, friends, colleagues, and/or family members at home. This is shown in the narrative below,

The only thing that keeps me sane is I have friends that understand the situation. Normally, when I get really exhausted, I just simply go and tell them. (Female, H1 T1)

Positive interactions with others and forming a close bond with co-workers were seen as a coping mechanism by one academic at her university, as well as a way of executing some of her daily tasks and responsibilities effectively,

I’m quite lucky to be posted at this university because I came and many young lecturers came too. We formed a very close bond. I just need to rely upon this group of friends, they can give their commitment. (Female, L1 T1)

Whilst many academics would generally depend on colleagues and their circle of friends for support, one academic would rather seek relief in a close member of the family,

I share my problems with only a few colleagues. I do have somebody who is willing to listen - my adopted mother. She’s somebody I can depend on. (Male, L4 T1)

***ii) Close family relational support at home and spouses’ involvement in one’s career to be a protective factor against burnout***

The second most popular set of coping mechanisms were close family relational support at home. The majority of participants stated that they got through hard times through receiving support from family members, especially spouses,

My coping resources would be my husband who does a lot of things, who cooks and takes care of the children. (Female, H2 T1)

***iii) Academics mentioning exercise and sports as a way to cope with burnout***

Two respondents (one from the Low burnout group and one from the Medium burnout group) emphasised that participating in sports and physical activities allowed them to beat stress and burnout and was also a great way to feel positive about themselves,

I don’t have stress. If I did, I’d take it positively. I do have my own way to de-stress - I go for exercises. I look forward to every afternoon to play badminton. If you feel good about your body that will definitely affect your daily life. (Female, L1 T1)

I always believe that one day the system and policies will change. As of now, I need to take care of myself. I can’t have high blood pressure. I exercise. It helps to release my stress. (Female, M2 T1)

***iv) Having a positive mental attitude towards burnout and giving up negative mental traits such as anxiety and pessimism, which actually produces burnout***

A constant positive mind-set was the fourth coping mechanism mentioned by respondents in warding off burnout. Some academics were very cautious in setting boundaries between balancing work and personal time and many cited that being committed to the job and having a positive outlook enables one to cope better with stressful situations,

Some people can be stressed out because of the expectation of the university, the KPI and being overwhelmed by the university requirements. I’m not really stressed out. It’s about your job and commitment. (Male, L4 T1)

One academic commented on a possible solution to her burnout problem,

Usually I would try to see the good in every situation. When everyone is talking bad about her (i.e. Superior). I would reflect on what are the good things that she’s done to me. (Female, H5 T1)

***v) Getting away or distancing themselves***

In addition to social support, close family ties, physical activities, and maintaining a positive viewpoint, participants also described drawing boundaries and distancing themselves from work as a good strategy to evade burnout meltdowns. One person talked about creating limits, whilst others depended on the weekends to recharge and rejuvenate themselves,

I put limits on myself. If I can’t cope anymore I would just leave the office. I don’t do anything on the weekends regarding work. Weekends are weekends. On weekends I’ll not entertain anything. (Female, H1 T1)

Most distancing, however, involved taking time off of work for rejuvenation,

As a normal person I do feel the stress. I look forward to the weekends, public holidays, time with colleagues, family and alone time sometimes. I look forward to going on vacation. (Male, L2 T1)

***vi) Religiosity and spirituality as protective aspects against burnout and being resilient***

Two academics suggested that religiosity and elements of spirituality can help them deal with increasing workloads and burnout,

I think there are a lot of sources, for example religiosity and spirituality can help you become resilient and overcome burnout. (Female, H5 T1)

When you make things easy for people, God will make things easy for you. That’s my character. Even though I have a heavy workload, I try to make things easy for other people. (Male, L4 T1)

For this theme, interestingly, all academics belonging to the High, Medium, and Low burnout cohorts had an equal share of coping mechanisms and were seen as well prepared to tackle burnout outbursts if encountering them in the future. These results validate and reflect what came out of the quantitative data in the first stage where findings revealed that most resilient academics endured difficult times by having a positive stance in life and due to their sheer determination and possession of firm beliefs that they are able to withstand trying times. Survey responses gained in the first quantitative phase corroborated the reactions given by academics in this second qualitative phase, however giving more depth as to how and what are the actual coping strategies most used by resilient academics.

**6.3.4 Theme T1.4: Thoughts of bringing work home**

Mixed reactions were presented by respondents upon being asked on whether they brought work home if things at the office piled up. Two academics said they did, whilst four others avoided it at all costs. Most academics who were also parents expressed guilt upon bringing work home due to it lessening their attention towards their children.

***i) Academics who avoided bringing work home***

Some academics felt that leaving work at the office and turning everything relating to the job off was most ideal although some felt otherwise. For these academics, building self-care into family relationships was very crucial, including eating together, spending quality time, etc. Academics mentioned that after a long day of work, all they want is to come home, see their spouse or kids, and feel relaxed and happy to be with them and not have to think about the office anymore, as shown below,

You’ve spent 7-8 hours per day at the university. I don’t think it is fair for yourself. It’s not healthy. (Female, M1 T1)

I feel that I cannot do my work at home because I feel really guilty. When you’re at home you need to look at your son’s homework. My son needs my attention. (Female, M2 T1)

***ii) Academics with no option, or still single and having no family commitment***

On the other hand, those who disagreed with the above group were mostly academics who were single and free of any commitments towards family. Others maintained that it is somewhat difficult and impossible to not bring work home. For this group of academics, the reality is that there are times when they had no choice but to bring work back,

I know it’s not good to bring work home but sometimes we don’t have a choice. If you don’t have enough time to finish your work at the office, that’s the last choice. (Female, H5 T1)

For the majority, bringing work home was perceived as not adequately balancing the work-family continuum, with the few rebutting that the whole system disallows them from taking any time away from their work as more work will be piling up soon. For academic-mothers, bringing work home had a slight impact on their conscience as they considered time at home to be for their children. The need to differentiate the home from work life was commonly recognised.

From a gender and career progression view, evidence shows that compared to men, women face a lesser likelihood of getting promoted (Johnston & Lee, 2012). Women with children are also less likely to progress and move up the career ladder compared to those childless career women (Kunze, 2014). According to Mason (2013) family formation tend to negatively affect a women’s academic career but not men’s. For women, having children is considered somehow a career killer and the effects are described as the “baby penalty” unlike for men (Mason, 2013).

Participants were asked how significant they thought promotion was and about their hopes for advancement in their career path. Few academics expressed an opinion whereas others did not have much view of this matter. Responses ranged from academics who wished to leave as soon as an opportunity arises, to those academics who, despite feeling the institutional environment to be burnout-inducing, believe in the necessity to first contribute to the institution before departing, as conveyed below,

Career advancement is important for academics. The final goal is professorship but I think I still have some things to contribute to this university before I actually leave. (Male, H3 T1)

In general, academics belonging in the High burnout group conveyed more opinions about their hopes for being promoted, were more ambitious, and considered promotion to be far more significant than academics in the other categories. This interesting finding could be linked with academics’ personality-types where those aiming too high and having too ambitious goals in life may risk burning out (Hill & Appleton, 2012). On most accounts, this is related to perfectionism or holding high ideals of oneself. Individuals with perfectionistic tendencies tend to combine their high expectations with what researchers describe as "perfectionist concerns", i.e. being too self-critical and likely to bring it on themselves if they fall short of such standards. It is this facet of perfectionism that results in burnout (Hill & Appleton, 2012). Therefore, it is not surprising that those conveying more opinions about promotion and being outwardly more ambitious were those in the high burnout cohort, due to them being heavily involved in their jobs and would naturally be the ones taking on more tasks than they can handle. This, if paired with perfectionistic concerns as mentioned above would hence result in such individuals being highly drained and burned out.

**6.3.5 Theme T1.5: The love of being an academic**

Even though negative reactions during this first stage were visible when it came to academics’ involvement in their career, many positive sentiments were also expressed. A number of participants brought up the theme of their love of being an academic, describing their personal fulfilment being employed in the field. For some, this fondness uplifts them in their everyday profession while for others it acts as a type of defence to confront daily burnout encounters.

***i) Passionate about doing research, writing papers, and the devotion to knowledge***

One very clear-cut finding from interviewing those who perceived their academic career as very fulfilling is that, they had an undying desire or eagerness to pass on their knowledge to others,

The thing is once I got my PhD I automatically loved research! I love writing papers and the best part is, it’s a part of your job. (Female, H1 T1)

Being an academician makes you engaged with knowledge and keeps you updated with the new knowledge. You’re always training yourself to research in your everyday life. (Female, H4 T1)

***ii) Inclination towards students***

Some academics described their love for the job due to their students being one of their motivational factors, especially when witnessing students finally graduating or speaking of their aspirations to be like them. Another participant considered it truly rewarding and felt satisfaction from teaching students when they could understand the lectures given to them,

My personal satisfaction is when I meet my former students and they say: “If I were to become a lecturer, I want to be just like you”. That’s really satisfying (\*laughs). (Female, M2 T1)

***iii) The love of teaching, educating, and rendering service to other individuals and the wider community***

I would say 99% I’m happy to come to work because I have so many things to do. I’m that kind of person that likes to contribute, to give service to people, to students, to the community. (Female, L1 T1)

***iv) The flexibility of working hours***

Another academic in the high burnout cohort pointed out that being in this career allowed her to have flexible job hours,

For me I love this job, the flexible time you have. As long as you finish your job, meet deadlines, make students happy - that’s the satisfaction you have as an academician. (Female, H4 T1)

Responses presented in this section suggest that quite a number of academics spoke of their fondness and devotion towards their profession during this initial stage. Remarkably, positive statements about the profession were also given by academics experiencing high levels of burnout. From one respondent to another, irrespective of having high or low burnout, a similar pattern of features such as empathy, being approachable, and having a caring attitude were among the features seen to be possessed by these academics. Many respondents mentioned their inclination towards students and having to escape their hectic timetables for these students. For the most part, many appeared to enjoy what they do and the added values of being in academia (the opportunity to contribute to society, to be a part of a knowledge-driven environment, etc.). Yet, those who perceived this occupation as very trying and strenuous were numerous as well.

**6.3.6 Theme T1.6: On being resilient and surviving burnout and other challenges**

During the interviews participants brought up the topic of resilience and of the necessity to display resilience in their job, as shown in the various subthemes that emerged from the data:

***i) The need to be resilient because of there being no other choice***

Participants often mentioned being resilient and demonstrating resilience because they have no other choices and that, many times, certain situations compelled them to be resilient,

Whatever it is you need to know your priorities. It’s not about the job, it’s how you cope with your environment. How discipline you are, how positive your thinking is. (Female, L1 T1)

At the end of the day, I have to settle everything by myself and at the end of the day, I had to be resilient. (Male, L4 T1)

***ii) Learning to be resilient through adjustments and adaptation***

This conflict with my superior made me learn how to become resilient. It’s actually the ability to bounce back and function well with this kind of environment. (Female, H5 T1)

***iii) Academics indicating that being resilient is part of their emotional intelligence***

Resilience is very important to academics. You need to bounce back quickly and it’s part of your emotional intelligence. So it’s crucial. (Female, M1 T1)

***iv) Being able to get through difficult times due to experiencing difficulty and surviving a particular hardship in the past***

I’m not that 100% resilient, but because I’ve been through my PhD. I was given 18 months to correct my PhD. That was the lowest point of my life. I didn’t have a job at the time. Practically I was penniless. (Female, H2 T1)

The frequency of use of the word “resilience” by certain individuals during this first interview, signified that these individuals do in fact possess a robust disposition and have the capability to recover and bounce back from turmoil and struggles. From their stories, some academics had learnt to capture resilience through adaptation with their current circumstances, some had prior experience in handling demanding situations, whilst others had no other option but to exhibit toughness in order to resist hardships.

**6.3.7 Theme T1.7: Effect of burnout phases on participants**

There were two subthemes emerging from Theme 7, which were: i) Burnout resulting in depersonalisation and the ii) Development of cynicism. Of the sample, three (n = 3) explicitly cited the need to withdraw and disconnect themselves from others and engage in detachment with their surroundings when facing a burnout situation. Two academics (H=1, M=1) revealed that the effect of burnout resulted in them developing a cynical and callous feeling towards others (students and those around them). These are outlined below,

***i) Burnout resulting in depersonalisation and psychological withdrawal from relationships and surroundings.***

If I experience burnout, I would seclude myself. You just want to be alone in your room. Be alone at home, have your own time. (Male, L4 T1)

***ii) Development of cynicism and a negative and uncaring attitude towards others.***

When I’m encountering burnout, I finish my classes earlier than usual because you lack motivation. The signs are obvious. I would end my class early and instead of giving lecture to my students I would give exercises. (Female, M1 T1)

For Theme 7, respondents described their experiences with regards to the influence burnout has on their daily duties and the extent to which it affected them in their interactions with those they have close contact with. The majority of responses relate to being in solitude upon facing burnout, feeling discouraged and demotivated to take part in work, and the development of an indifferent and unfeeling attitude towards other people.

**6.3.8 Theme T1.8: Factors triggering stress**

During T1, participants from the high burnout group described more stress-triggering factors compared to those in the low burnout group. The majority of comments were made in relation to stress stimulated by university policies and environments. Three respondents perceived marking as the most challenging and tense, whilst four revealed that the introduction of the Research University concept and the KPI were stress-triggering factors. These are further outlined below,

***i) Marking papers and the university syllabus***

Many participants highlighted marking papers as one of the most stressful academic duties they had to deal with each semester other than having to complete the syllabus within the given time as shown below,

The most stressful period is during the mid-semester. It’s the most challenging because you need to make sure all your syllabi are completed before the end of [the] semester. (Female, H4 T1)

And when it comes to marking papers…it’s like hell to me. (Female, H1 T1)

***ii) Stress due to University policy or management and environment***

Others expressed of the role of university policies and management on their stress and burnout levels. Some complained of the poor management services provided for them each and every semester whilst others brought up in regards to the frequent changes to policies and inconducive environment deemed unfitting for the flourishing of work,

The first 2-3 years were really challenging. Because you need to cope with the policy, environment…culture. It took me three full years to adapt! (Female, M1 T1)

We teach different subjects every semester. The stressful thing is, we’re only given our timetable two days before our classes begin! I had to hunt around for resources to teach! (Female, H2 T1)

***iii) Stress generated and induced by the KPI and introduction of the Research University (RU) concept.***

Participants identified the introduction of the KPI and the concept of RU as affecting their performance and causing them to experience burnout owing to the demands and expectations,

You know the KPI is always changing…the goal is always changing. It’s very tough. (Female, H4 T1)

When they introduced the concept of Research University (RU) the burnout started, the whole paradigm changed, the KPI changed too! (Female, H6 T1)

In linking this theme to a broader discussion, questions arise as to what extent the nature of academic work is changing these days, and to what degree does it truly induce work-related strain and pressure. With the constant evolution of academia and the introduction of metrics and datafication modern technological trends have turned many aspects of academic work life into computerised data and the transformed these data into new forms of value or “metrics” to assist in such standings and assessment. The questions arising from this include: Do these metrics actually work? Do they actually measure what they are trying to measure? Are they fair? Are they over-used? Today, metrics play an immense role in most occupations and are used to measure individual achievement and success (Beer, 2016), yet these numbers can be surprisingly seductive. With such dependency on these metrics and datafication, mishandling or even over-usage can somehow incite and prompt stress-related tension and burnout among vulnerable individuals at work.

In countries such as Britain, where metric-heavy assessments of universities are profoundly used, individuals are prone to feel more content and rewarded when giving quantity over quality and thus will modify their behaviour to match such aims (“Assessing Assessment”, 2010). Individuals who make every effort to achieve this objective may risk impairing themselves in the pursuit of accomplishing such goals. No one single profession can be summarised by a number or performance indicator for that matter. Academics spend countless hours teaching, guiding students, engaging in publications, writing or reviewing grants and papers, serving as reviewers, and taking part in collaborations to which all these are not easily quantified by just a specific numerical figure.

Additionally, another subject emanating from this eighth theme, in response to views given by participants relating to factors triggering stress, are ideas of the “neoliberal academy” or the “neoliberal university”. Neoliberalism has been expansively theorised and is characterised by the growth of individualization, being clear of government interference and the establishment of market logics and wisdoms into the domains of everyday life (Gill & Donaghue, 2016). In neoliberalism, individuals are urged to become self-governing, selective, self-managing, and self-improving (Gill & Donaghue, 2016). Subjects are sought to be reliable, in charge, and accountable. Neoliberal academia conversely, promotes an ideology of individual achievement that frames triumph and failure as purely personal “achievements” and encourages a very competitive attitude and chronic self-critiquing way of thinking (Feldman & Sandoval, 2018). Everything has now become a competition for universities in areas such as research excellence, research resources, attracting students, private endowments, and so on.

In this new atmosphere, there is every reason for university management to adopt the methods and cultures of corporate institutions. Recent changes in academia have led some to claim that neoliberalism, shaped by organisational tactics that are in constant target to assess individual performance and output by means of “metric power”, is transforming academia into an increasingly insecure place for work and study, not to mention a place in breed of endless “competition” (Beer, 2016; Berg, Huijbens, & Larsen, 2016). The consequences of this insecurity encompass mental health problems in both academic staff and students alike (Bal, Grassiani, & Kirk. 2014), and, in most cases, produces work-related stress, anxiety, and burnout due to individuals trying to keep up with the pack (Berg, Huijbens, & Larsen, 2016; Cidlinska, 2015; Feldman & Sandoval, 2018).

The voicing of exhaustion, an outcome that is under-theorised in the language of universities, is imperative here as we think about the increased demands as a result of the neoliberal academia scenario. Some argue that instead of the development of high quality human resources and excellent research and teaching, they lead to burnout syndrome and the early exits of early career researchers, especially women (Cidlinska, 2015). Responses by dissatisfied academics range though some choose against an academic career and others adopt a strategy of individual withdrawal within the system by protecting their individual space and independence, i.e. refusing to engage beyond officially required minimums and so on (Feldman & Sandoval, 2018).

Overall, results emerging from T1 illustrate the various work and external factors providing the contexts for burnout in academics ranging from unreasonable demands and expectations from others, to excessive and intolerable workload, overbearing university policies and un-conducive environments. Findings also exhibited that there did exist diversity in the aspects of academic-work-environment fit when confronting distressing circumstances in their work. In other words, when academics encountered demanding situations, they employed diverse mechanisms to aid them in coping with such difficulties in order to evade burnout, the most popular being opting for strong communication with peers and colleagues to fend off burnout phases. Many depended on close family support and spousal involvement in their career, whereas others on tactics that preserved their self-actualization, for instance participation in sports, exercise, and physical activity. Some participants employed religiosity and spiritual factors to counter burnout while others took time off and distanced themselves from the workplace to maintain a positive mind-set.

**6.4 Second data collection stage (Time point 2)**

T2, differing from the first interview, focused on obtaining any information about the changes (positive/negative) or variations academics faced in terms of their burnout, engagement, etc. These themes were additional to the first set of themes in T1. During T2, four main themes emerged; these themes were 1) beginning to illustrate the more negative aspects of their career; 2) getting away to cope with burnout; 3) indication of an adaptation process among academics; and lastly 4) relentless attitude and continual grit.

**6.4.1 Theme T2.1: Illustration of the more negative aspects of the career**

Following up with the same participants (n = 12) from T1, a month later, this second round of interviews led to a markedly higher illustration of the more negative aspects of the career than reported by participants in the first wave. This was also depicted among participants who previously displayed engagement in their work (i.e. those well below the levels of high burnout). Under this first theme, four sub-themes arose which are: i) the inability to cope with accumulating work burdens; ii) declining engagement levels/enthusiasm or lacking motivation and growing sense of cynicism; iii) diminished number of idealistic views expressed in regards to the career; and lastly, iv) evidence of emotional trouble still existing and burnout levels not noticeably reducing.

***i) Inability to cope with accumulating work burdens***

By the second interview, the overwhelming job demands in the career were more frequently voiced and discussed. Participants conveyed their inability to cope with the mounting workload during the mid-semester. This applied even to those initially classified as belonging in the Low Burnout (L) cohort,

It’s a hectic time because for research you have to go and meet people. Plus the programmes that we need to do, classes. It’s stressful because of too many things to think about! (Female, L1 T2)

***ii) Declining engagement levels and enthusiasm, lacking motivation and a growing sense of pessimism***

The lack of motivation or being demoralised due to being burned out was expressed by many academics, either as a consequence of the increase in workload or demands, or as a direct result of the individuals they worked with,

I can feel that my teaching is of less quality now than before in terms of the materials, of what I tell my students. When your mind is preoccupied with so many other things, it will affect not only your students but also yourself as well. (Female, L1 T2)

***iii) Diminished number of idealistic views expressed in regards to the career***

In T2, one notable change between the first and second stage of interviews was the frequency with which academics expressed negative opinions and thoughts of their once idealistic views of being an academic. During the first interview, it was not surprising that many voiced their keen opinions about committing more to the new semester and aspiring to work harder. With bearable workload and lesser demands at that particular stage (T1), academics may have not foreseen the actuality of what was to come later in the semester. The onset of disillusionment and discouragement during T2 was also expected. During the second wave, it was noticeable that what used to be optimistic views in the first round were now altered to become more of scepticism, as conveyed below,

I didn’t expect that this semester would be that stressful. It’s like almost every week I have new things piling up. Of course we have a time period for research, for classes, but it’s like we have to commit to it every week and for this semester a lot of staff went to further their studies, so there’s not so many members around. (Male, L2 T2).

***iv) Evidence of emotional trouble still existing and burnout levels not apparently reducing.***

A one-month gap after the initial interview took place academics during T2 were still seen to exhibit emotional exhaustion when describing their present condition. Academics in the High Burnout cohort (H1-H6) consistently displayed greater prevalence of being emotionally drained, compared to those in the other categories as shown in the following narrative,

The workload is really high now and my burnout level is definitely worse because this semester I’m the Academic Advisor. It’s been very hectic compared to the last interview, I’m more stressed out. That’s why I’m really looking forward for this semester to end as soon as possible. (Female, M2 T2)

Another academic narrated on her burnout levels escalating due to the frustration of not having her work and effort acknowledged by the higher management,

Right now, definitely I feel tense, exhausted, and burned out because classes have started [and] students are already missing. Another part of my stress is, I just got my marks for last year’s assessment and I didn’t even achieve 80%. The paper I sent, if it’s not published, it’s not calculated. I feel my effort is useless. (Female, H1 T2)

This negative theme identified in the second data collection stage could possibly be explained due to the escalating job assignments and strains experienced by the participants halfway through the semester. At this juncture, having the incapacity to manage such burdens academics’ ideals and feelings of enjoyment on the job will undoubtedly subside and be of less worth than what they may have perceived earlier on, i.e. during the very beginning of the semester. As a result, arguably this would escalate to more burnout.

**6.4.2 Theme T2.2: Getting away to cope with burnout**

One participant during this second stage considered taking a long holiday from the hassles of the work place. This particular academic nonetheless highlighted that vacations do not actually relieve the workload, which would be awaiting him upon returning. He mentioned that the problem with taking time off is that you are right back where you started, or even worse. There is an added stress of the vacation itself, as emphasised below,

Well, I experienced burnout last week and I have it this week too! I feel like taking a LONG holiday. Last month I want to Thailand for a holiday but I didn’t feel it like a holiday because too many messages kept coming through my phone [and] emails. Once the plane touched down, I started to feel the stress. When I came to the office, emails were piling up, due dates, everything. (Male, L2 T2)

Hence, only one participant (from L2) mentioned taking a holiday to temporarily escape the stresses of the job. The participant however noted that holidays do have their own disadvantages upon returning, due to all pending assignments wanting attention. Other academics opted for a more long-term and lasting coping mechanism i.e. adapting with the circumstances, as mentioned in the subsequent theme.

**6.4.3 Theme T2.3: Indication of the presence of an adaptation process among participants**

Whilst some academics presented negative reactions when depicting their current state, several posed positive evaluations of their current well-being. Some spoke of their adaptation with their surroundings and others noted their newly learnt resilient-promoting factors where they were most likely to adapt positively in the face of pressure and bounce back quickly when it came to confronting job-related stress. Academics stated that some of these adaptation tactics were very helpful and were picked up along the way, through unconscious assimilation discovering that they offered more gains, compared with repeatedly succumbing to adverse stress and pressure.

Additionally, some academics were fortunate enough to adjust with their strenuous work setting as a result of the surroundings becoming better or eventually improving (e.g. lessened deadlines, publications being accepted, reduced workload).

***i) Adaptation due to learning or unconscious assimilation***

When you have to focus on the research proposals, reports, entertain all the requests from the higher management, for me it’s a bit of multitasking but I’m learning. (Female, H4 T2)

***ii) Adaptation due to the surrounding environment becoming better and improved***

I feel better than the last time because that time, I had a lot of deadlines. Now I still have my administration duties. I have to evaluate manuscripts as a reviewer. For now, I think I’ll quite enjoy what I’m going to do. (Male, H3 T2)

Academics who reported going through adjustments and an adaptation period when faced with demanding situations were mostly those in the High Burnout cohort, with one participant from the Medium burnout group.

**6.4.4 Theme T2.4: Relentless attitude and continual grit**

The last emerging theme for T2 was ‘Relentless attitude and continual grit’. For some participants, their attitudes and behaviours had not altered since T1 and this group of academics displayed constant eagerness and perseverance (resilience) when it came to their routine work. All those reporting grit and determination belonged in the Low Burnout cohort (L1-L4), as narrated by one participant,

Throughout the semester I’ll always have the same feeling. Even though I feel the burden, I’ll try to bring positive energy to the class. At this moment, I feel excited because I have my task list. So every time I complete a task, I would feel really accomplished! (Female, L1 T2)

Positive comments in regards to this theme that represented job engagement, where participants were seen to prioritise work duties and their students rather than themselves,

It’s been a nice week of teaching. I’ve a lot of work; grants, administrative work, but I’m a lot happier than the last time. The burnout levels are less too. It’s just when I’m given work (which is not related); it’s stressful because it takes my time away from my students. (Female, L3 T2)

In summary, the data transpiring from T2 contrasted with that of the themes in the first wave; for this wave, efforts were made to capture explanations that reflected the changing nature of academics’ burnout experiences. Thus, themes depict their adaptation strategies with burnout since T1, their way of handling burnout, and how they exhibited perseverance (if any) throughout the middle of the semester. Those on the opposite continuum, on the other hand, (i.e. academics’ who remained burned out) exhibited the more negative aspects of the career in repeatedly expressing the decline of their engagement levels and enthusiasm. Results for this T2 revealed that academics who previously presented evidence of burning out during T1 did not necessarily remain burned out during T2. Likewise, participants who initially manifested being less burned out and less drained during T1 (those in the Low and Medium Burnout cohorts) did report being burned out during this second interview phase.

**6.5 Third data collection stage (Time point 3)**

In this third stage, similar to the second wave, academics were asked to describe any significant changes to their levels of burnout towards the end of the semester. Three themes emerged from the data: 1) evidence of emotional trouble and exhaustion still existing and burnout levels not reducing; 2) indication of an adaptation process among participants; and 3) academics showing positive enthusiasm despite facing difficult times.

**6.5.1 Theme T3.1: Evidence of emotional trouble and exhaustion still existing and burnout levels not reducing**

Under this first theme, two subthemes arose: i) emotional exhaustion due to work demands, workload mismatch, conflicts at the workplace, and other external factors, and ii) blaming heavy workloads for burnout meltdown and the lack of engagement due to work not relating to their focal academic career.

i***) Emotional exhaustion due to work demands, workload mismatch, and conflicts at the workplaces, as well as other external factors***

During Time point 3, it was noticeable that academics exhibited continued burnout from the point of the last interview (T2) and according to them they were due to the endless work demands, job mismatch, work conflicts, and others,

I’m fine with teaching and participating in one or two faculty’s programmes, but when it requires travelling, it’s stressful and expedites the burnout process. (Male, L2 T3)

My stress level has increased. It’s difficult to relax this month. The stressors are due to the high expectations of my supervisor and trying to meet deadlines. (Female, M1 T3)

***ii) Blaming heavy workloads for burnout meltdown and the lack of engagement due to work not relating to their focal academic career***

Academics also acknowledged that the hefty workloads at certain times hindered them from dealing with their everyday duties of being an academic. To the extent that when everything began to pile up, some would suffer impaired focus and, in other cases, ineffectiveness or a lack of accomplishment. Others complained about being handed tasks that were not even academic-related,

I don’t have enough time to focus on other tasks (publication/conferences). The increase of students, especially for final year projects, increases the time for consultation and marking their assignments. This makes me lose my focus and engagement towards work. (Female, H4 T3).

In this theme, academics continued citing work demands, hefty workload, workload mismatch, pressure to achieve targets, and workplace conflicts as contributors to their burnout and exhaustion towards the end of term. The stressful working environment was also raised by academics as another trigger for their burnout meltdown during this last time point.

**6.5.2 Theme T3.2: Indication of an adaptation process among participants**

Similar to what academics reported during T2, this theme reappeared during this stage and the majority of academics were found to be further adjusting and assimilating with the job demands at the workplace.

***i) Adaptation due to learning or unconscious assimilation***

I feel freer from the workload. My level of burnout and motivation are balanced and things got better, too. I can now easily manage things because I only focus on one thing at a time. (Female, L3 T3).

***ii) Adaptation due to the surrounding environment becoming better, improved, and support given by others***

My stress levels have greatly reduced simply because my HOD is resigning soon. So it’s improving my well-being since I know she’ll no longer be around. (Female, H5 T3)

Clearly, academics were observed to have adjusted better to their challenging surroundings and have taken in the demands of their jobs during this third stage. Most reports were from respondents in the High burnout cohort, with two participants from the Low burnout group.

**6.5.3 Theme T3.3: Academics showing positive enthusiasm despite facing difficult times**

Despite the fact that the challenges and job strains were not always present, they were often enough to make academics become increasingly frustrated and several academics demonstrated that they did not swerve. This last theme for T3 illustrated participants having a hopeful view of the future and what lies ahead, evidently showing their levels of robustness and resilience. They were unquestionably the few that endured trying conditions and, interestingly, some were those initially classified in the High burnout cohort.

***i) Having an unswerving positive outlook***

During this third interview, many academics now viewed their challenges and struggles as just transitory, not permanent, and the majority of academics held a growth mind set where motivation aided them in coping, as depicted below,

I'm trying my best to stay positive and healthy. My level of engagement towards work, I think I’m doing okay with my classes despite the increased level of stress. (Female, M2 T3)

***ii) Being preoccupied and engrossed with work***

One participant remarked that the more work assigned to her would make her feel content and satisfied due to having achieved something,

I would say my motivation is still at the same level, if not increased. I’m the type that the more work I have and the more that can be accomplished, the happier I would be. I always think that I’ll gain more if I work more. (Female, L1 T3)

In this last theme, those reporting having endured such burnout conditions may have accustomed themselves and been habituated with what was around them. Nevertheless, there were still a few who continued in their burning out nature right up until the end of semester. This theme hence concluded the third stage of the data collection.

**6.6 Summary of Main Findings and Arguments**

Addressing the main aim of this qualitative study, semi-structured interviews were conducted to gain insights into Malaysian university academics’ perception of job burnout. As Shaw (2014) and Watts and Robertson (2011) observed, this area of university academics’ burnout is in fact and undeniably under researched. This study adds to the theoretical body of knowledge by providing understanding of Malaysian university academics’ perceptions of job burnout.

The available evidence suggests that burnout occurring for these academics was mainly due to stress, overbearing institutional factors, workload demands, the Pressure to Publish, and highly competitive environments. The work-family conflict struggle and change management seem to also be contributing factors. At the same time, burnout at the highest level (or at its lowest) could evolve into variations over the course of one semester or fluctuate over time. This would allow a little period for recovery if academics were in possession of good resilience skills and coping abilities to keep engaging in work. Interview data indicated that in general, most university academics found their careers stressful. Overall, according to the pool of evidence gained from the interview results of this qualitative stage, there are some salient arguments and points that can be derived of burnout and well-being among university academics in this study. A summary of the findings, as well as the nature of the burnout problem is as follows:

* High levels of job-related stress are reported to occur across different types of universities and across career stages and high levels of stress are associated with heightened burnout phases (Khamisa, Peltzer, Ilic, & Oldenburg, 2017).
* Individual-specific stressors may place academics at higher risk of burnout and these stressors can later result in anxiety, demotivation, reduced workplace productivity, and intention to quit the job.
* Certain personality types also put academics at higher risk of burnout, e.g. the Perfectionist Personality Type who is accurate, thorough, and orderly, and holds a self perception as being responsible and hardworking, while having a strong sense of purpose and high ideals (Sander, 2017). And as Robertson (2011) puts it, positive characteristics that can make lecturers more pleasing teachers as openness also makes them more disposed to suffer fatigue and emotional exhaustion.
* Interviews also suggest that academics blame the system or institutional factors for their burnout episodes, i.e. the pressure to perform coupled with a lack of institutional support can give a severe impact on their well-being.
* Working in academia or in a strict, traditional and conservative institutional setting (lacking open mindedness, freedom to work, where all things are constantly assessed through accomplishment and performance indicators) is a precursor to burnout.
* A lack of resources, cuts in funds, impossible workloads, and the mounting expectations from parents as well as students who are investing more for education, the situation is likely to become even worse, and with academics unable to perform this puts them at an even higher risk of succumbing to burnout.
* Academics are expected to conceal their emotions in all circumstances in a professional way or to “heal themselves”, and should engage in resilience as a last resort to cater to the demands of students and management. Not one respondent sought any professional help but rather shared their burnout experiences with close friends and family. This may result in emotional dissonance as the conflict or incongruity between emotions felt and the emotions required to express to conform to some display rules (Zapf & Holz, 2006).
* Age also demonstrated an association, with younger and less experienced academics appearing more vulnerable to burnout. Particularly those at the start of their careers or in the Survival or Discovery stage compared with academics in the later Establishment and Advancement stages (or middle career). This could be as a result of the academics’ capacity to manage workload better and are more highly qualified and possibly display better resilience as well (Watts & Robertson, 2011).

Evidence show that there is a mixture of academic-specific stressors and a range of related risk factors that pose a probable risk to vulnerable academics susceptible to burnout states. Alternatively, institutional-specific stressors that lead to burning out also emerged during this qualitative stage, which affects a significant proportion of those in the higher education sector.

**6.7 Conclusion**

Therefore, based on the research questions, the data were hence organised to form three main segments for the qualitative piece of the study, i.e., the first data collection stage, second data collection stage, and the third data collection stage with each segment comprising of themes and sub-themes independent of each given time point. Academics’ responses at Time point 1 were basically perceptions of their professional roles as academics, the occurrences of burnout, and work engagement (if any) at the very start of the semester and progressed to how they depicted their current levels of burnout at Time point 2 in reporting any notable changes from the previous Time point 1. Lastly, in Time point 3, unfolding any significant variations in their burnout and engagement towards the end of the semester. In conclusion, the first stage of the data collection (T1) resulted in eight main key themes emerging from the analysis. Four main themes emerged from the second interview wave (T2), and three main themes from the third stage (T3), respectively.

Moving our focus away from just the themes to present a summary of the data from participants of this qualitative stage academics grouped in the Low burnout group mostly worked in public institutions, in a social sciences background, were single, and had varying years of experiences in academia. In contrast, the High group was more associated with academics belonging to the Survival stage of their career (i.e. five years or less of experience) and the Establishment stage (6 to 15 years of experience). Most academics experiencing high burnout in this sample held Senior Lecturer posts, were in the Sciences, worked in public universities, and were female and married, except for one participant. Their ages ranged from late thirties to early forties.

In terms of the findings from this qualitative analysis stage, whilst each participant’s experience was, in fact, unique, certain commonalities across the data could be identified. Participants across the longitudinal dataset revealed various facilitators and inhibitors leading to burnout at differing levels, and these levels mainly fell into four main categories, which are 1) individual, 2) interpersonal, 3) organisational, and 4) systemic.

**1) Individual-level facilitators/inhibitors of burnout**

Some of the emerging themes relate to the individuals, their own situations or personalities. Certain individuals tend to have the disposition, or means to cope, whereas others do not have such resources. We might expect that, in similar occupations, these same individuals may report the same things. So what actually separates those academics who are able to survive a burnout outburst from academics who struggle with their burnout episode?

These individual-level facilitators of burnout are dispositionally-bound i.e. some academics may, by nature, have certain dispositions that protect them from burnout and, in contrast, some individuals have specific traits that predispose them to develop burnout. Some individuals lean towards pursuing perfection in whatever they execute and consistently hold unrealistic goals for their daily routine. This has led some into burning out far more quickly and frequently than those who give themselves some room for errors. Hence, certain personality types and temperaments (e.g. the Perfectionist Personality Type) do put certain academics at a greater likelihood of burnout than those without such tendencies.

On the more positive side, according to the sample, those described as having “grit” seemed to be the ones more likely to succeed compared with those lacking this quality. Having grit includes constantly having the commitment to finish what is started, to rise from any setbacks, and surviving hardships, to want to improve and succeed, rarely feeling discouraged when facing trials, and to undertake continuous and sometimes unpleasant practices in order to perform a particular task. Grit is undeniably a separating factor and is key to the passion and perseverance for pursuing very long-term goals. This grit persona can aid one in preventing burnout.

Furthermore, the longitudinal data revealed that for some academics knowing when to recharge and get away or distance themselves from all the demands is an inhibitor of burnout. Therefore, knowing the art of recognizing when to stop or when to take a break is key in evading burnout meltdowns. For some individuals having no clue as to when to fully unplug is one reason they may be victims of burnout. The art of knowing your own breaking point is crucial when you are close to or at a burnout juncture. Stability, when it came to balancing things at home and in the office also aided in constraining burnout. Equally, knowing when to bring work home and setting up a time limit were issues brought up by respondents in order to avoid losing their focus during quality family time and towards their children. Engaging in physical exercise was another individual-level inhibitor of burnout. When academics felt so mentally burnt out from juggling multiple demands, many recharged their brain and enthusiasm by working out.

**2) Interpersonal-level facilitators/inhibitors**

Positive and negative interpersonal relationships and their fluctuating nature over time were recognised to be central facilitators or inhibitors of academic burnout. Academics acknowledged specific interpersonal facilitators and inhibitors that influenced the curbing of burnout, a key relationship being building solid communication with colleagues whom they always seek advice and opinions from and with those who are in the same situation as themselves. Such bonds assisted participants when they had to face challenging situations in their everyday role and to navigate through tough or uncertain burnout episodes. Knowing there is always someone to turn to, to pour out their distresses, was a very important interpersonal inhibitor of burnout for many academics in the sample.

Support from bosses, mentors, and superiors was also very essential, with participants expressing the benefits of being able to candidly discuss their issues at work, whenever needed, with their reassuring superiors. This was considered a good opportunity to share uncertainties and seek answers in a non-judgemental setting, thus inhibiting burnout. In contrast, for those having no luxury of conversing about such issues with their superiors burnout tended to accelerate, due to the lack of social support and this led to supervisory conflicts. Academics also mentioned the nature of the support they received at home from their spouses. They truly valued the opportunity to explore their doubts with their partners. Alternatively, participants who were not married experienced this by confiding in a close member of their family.

**3) Organisational-level facilitators/inhibitors**

Other themes were related to the local organisational unit (e.g. faculty, institution) where the academics work. Academics reported particular policies, working practices, and also prominent individuals that acted as organisational-level facilitators and inhibitors in adding to or mitigating their burnout levels.

The majority conveyed their frustrations when it came to the lack of basic necessities and resources provided by their institutions, and considered them one very major hindrance to performing well. They felt having to cater and look for resources themselves aggravated and accelerated the burnout process. University management failing and not placing much emphasis on staff training was also another organisational-level facilitator of burnout for these academics. Respondents also brought up “unseen” activities that senior management members were involved in, for example, cronyism, abused promotions, etc.

Additionally, holding multiple roles and being given added responsibilities were in fact appreciated, but only if participants could choose to decline. Problems occur when such duties (mostly administrative) consume more time to execute than focal obligations, which academics perceive as just adding further strain. Overall, participants were most likely to identify facilitators of burnout at an organisational level, compared to any other level.

**4) Systemic-level facilitators/inhibitors**

Finally, there are systemic issues that stimulate burnout in academics. These systemic-level facilitators or inhibitors may have a different impact for different individuals and, to some extent, can be constant across countries (e.g. the trend to look at academic metrics or performance indicators). The systemic level explains outcomes from a system-wide level that refers to the local systems and university practices that participants are interacting with.

Senior and established academics identified the introduction of the Research University concept as a useful system put in place locally, but others (the younger academics) deliberated on this and felt that the times when their burnout was in full swing were due to this paradigm shift. Some noted the lack of proper planning of this RU status launch and the fact that those who were less experienced with no knowledge of their roles or what to face in the initial months of the new surroundings were thrust into this change. Owing to such reasons, burnout was more likely to be triggered among junior academics in the sample. Participants emphasised the need for guidance, particularly in adjusting to the new concept of being a part of the RU setting. Linked to this RU concept, participants conveyed the demands of the KPI as their main burnout facilitator at this level. Participants narrated on the endless competing demands on the system and the struggle to achieve KPI requirements. For junior staff, prior to gaining tenured status, having certain competencies assessed was extremely taxing and facilitated in triggering burnout.

**Chapter Seven: Discussion**

**7.1 Introduction**

The discussion section in this thesis addressed each research question accordingly. Each research question was answered from one analytic approach at a time, before a general discussion of the research question was presented. This study examined the relationship between burnout and work engagement among university academics in Malaysia. It was intended at identifying the levels of burnout in the academics across career stages/years of experience and to explore any identified changes of the burnout across one semester. This also served to ascertain what factors Malaysian academics identify as influencing their burnout levels. The study produced a number of beneficial insights into how university academics coped with and survived series of burnouts throughout their academic career. This chapter will present a discussion of the study’s findings and address the results through the stated research questions.

**7.2 Discussion of Research Question 1**

*What is the relationship between work engagement, burnout, and resilience in university academics in Malaysia?*

Data analysis for research question 1 using Structural Equation Modelling revealed that for burnout and engagement, a significant relationship in the hypothetically expected direction demonstrates that these two variables negatively influence one another; that is, academics experiencing a higher level of burnout exhibited lower levels of engagement. Bivariate correlations computed also showed a significant negative relationship indicating that academics reporting low degrees of engagement in their work also reported being more emotionally exhausted on the job. These findings further back the ideas of Mojsa-Kaja, Golonka, and Marek (2015) that burnout and engagement are typically labelled as being opposing features in the relationships people establish in their jobs or, in other words, that when a person is experiencing a high degree of emotional exhaustion (or burning out) they would tend to exhibit disengagement in their work and vice versa.

Originally, burnout and engagement were considered the same construct (or opposite ends of the continuum), but it was Schaufeli et al. (2009) who looked at this from a different angle by operationalizing engagement in its own right. As engagement was previously measured by the opposite scores on the three scales of the Maslach Burnout Inventory (MBI), i.e. unfavourable scores revealing that of burnout, while favourable scores suggests engagement (Schaufeli et al., 2009). Today, this is no longer the case, as engagement is now believed to tap different qualities of a person’s experience (Klusmann, Kunter, Trautwein, Ludtke, & Baumert, 2008a). Work engagement, among other things, is known to be linked to well-being and constructive emotional feelings towards one’s work (Demerouti, Bakker, de Jonge, Janssen, & Schaufeli, 2001), aids individuals suffering from stressful work to overcome a particular adversity (Britt, Adler, & Bartone, 2001), is positively related to commitment towards the organisation (Demerouti et al., 2001), and is expected to influence the performance of employees in general (Kahn, 1990).

Burnout, in contrast, is an extended response to persistent work-related stressors (Maslach, & Leiter, 2016) and is also depicted as a state of exhaustion where one is sceptical with regard to the significance of their profession and uncertain of the ability to accomplish matters (Maslach, Schaufeli, & Leiter, 2001). Asensio-Martinez et al. (2017) later redefined the main burnout components and labelled exhaustion as the feeling of having decreased capability to work and function productively at the workplace, due to the lessening of emotional resources, excessive demands, and insufficient means available in meeting these demands. They then see depersonalisation as the loss of meaning and lack of interest, feeling indifferent and feeling detached toward one’s job, and viewing reduced accomplishment as the inability to complete tasks on the job due to feelings of extreme incompetence (Asensio-Martinez et al., 2017). Henceforth, in general, these two constructs do not quite measure the same things exactly, contrary to what some present.

Results of this study also corroborate other earlier findings, which specifically hold that engaged employees suffered far less burnout in their careers (Bakker & Demerouti, 2007; Bakker, Demerouti, & Sanz-Vergel, 2014; Demerouti, Bakker, Nachreiner, & Schaufeli, 2001; Denton, Newton, & Bower, 2008; Llorens, Schaufeli, Bakker, & Salanova, 2007; Schaufeli & Bakker, 2004). From the sample, participants’ responses to questionnaire items relating to burnout showed that the majority of them felt they were burned out from work and fatigued on a daily basis upon having to face another day on the job. Responses from participants also indicated they felt frustrated and unfulfilled with their current academic profession.

In regards to academics’ levels of engagement and their perceptions towards this factor, responses revealed that a great number of those in the sample were in fact attentive and cared about the problems of their students. In classes too, academics showed high empathy towards those they teach. Even though responses to questionnaire items relating to their burnout suggested that the majority were in a “burnt out” state, it also pointed to a significant point that many of these academics do consider the problems of their students as their leading priority and showed empathy towards them, regardless of being emotionally exhausted from their occupation. This finding was quite unexpected as it differs from those observed in earlier studies, where educators who were suffering from burnout would tend to display high negligence towards those in their care or specifically show less sympathetic feelings toward their students, have less bonding with them, and would lack in presenting their genuine concern (Fisher, 2011; Jennings & Greenberg, 2009). This what Maslach and Leiter (1997) termed detachment or depersonalisation. Most studies in the field of burnout have found that burned out educators lacked a sense of engagement in their classes, with students, or even to provide any sort of motivation for their students; they would also tend to teach less enthusiastically and be less creative, and become less committed to the role altogether (Kucukoglu, 2014; McHugh, Kutney-Lee, Cimiotti, Sloan, & Aiken, 2011).

The results suggest that despite being burned out, these Malaysian academics were considerable of those around them and had the penchant to put others first, rather than themselves. It is encouraging to compare this finding with that found by Gandi, Wai, Karick, and Dagona (2011) in their sample of nurses. Similar to academics, nurses are known to be selfless and feel it is their calling to care and provide for others. Driven by the longing to cater and care for others, nurses are vulnerable to burnout due to working long, hectic hours; nurses often neglect their own needs and this causes them to break down and burn out. Academics are similar where they disregard catering to their own needs and dedicate their lives to students and academia. Moreover, the current competitive setting of academia, where most would race to make a contribution to knowledge, often generates a stressful and taxing environment and, along the way, their own needs and well-being worsen and burnout would hence mature and induce further disengagement with the job.

Findings from this study strengthened the burnout and engagement relationship findings based on the Jobs Demands Resources (JDR) model proposed by Bakker, Demerouti, and Verbeke (2004). Job demands which necessitate continual physical or psychological effort (i.e. role overload, emotional demands, high work pressure, and poor environmental situations) are proven and would eventually lead to academics’ level of exhaustion and energy depletion, in addition to other problems. On the flip side, job resources nurture engagement and enhance performance on the job and when one has the sufficient job resources burnout can be hindered (Bakker et al., 2004). Participants in this study experienced and applied (job resources) during times of burning out on the job, supporting the phenomenon known as the occupational stress theory of the Jobs Demands Resources, which suggests a person’s strain (burnout) is a reaction to the difference between demands on the individual and the resources one has to deal with them to effectively and productively work (see Mojsa-Kaja, et al., 2015; Schaufeli & Bakker, 2004; Schaufeli et al., 2002). Here, the JDR model aids in monitoring the workplace by assisting to elevate work engagement and preventing burnout.

Results of this present study also showed that workload and feelings of Pressure to Publish, among the sample of academics, led to a significant influence on burnout and resulted in added disengagement towards work. These findings emphasised the role of a heavy workload in the career and pressures to publish, which brings about a sort of psychological detachment from work (Sonnentag & Kruel, 2007). Both constructs show a positive link with burnout and these results provide further provide support for the hypothesis: the more academics experience a high level of perceived workload, the higher their reported burnout. Equally, the high levels of Pressure to Publish experienced by academics also promoted higher burnout based on the survey findings. These results agree with prior findings, such as those of Tijdink et al. (2013) in their sample of medical professors and their perceptions of publication pressure where a majority of these medical professors deemed that when the level of publication pressure has become too excessive, such perceptions were thus statistically correlated to their symptoms of burnout (Tijdink, Vergouwen, & Smulders, 2013). Findings of this study also reflected that of Moore (2000), where educators’ mental resources and energy to perform well and accomplish good results were reduced when they were emotionally tired due to job demands. Henceforth, it can be reasoned that burnout in academics in this sample is more likely to occur when workload is combined with pressure felt to publish, rather than with just workload alone.

In terms of the correlation between academics’ burnout and resilience, a significant negative relationship revealed a counter direct relationship. This study’s findings echo results from the growing body of the burnout-resilience literature, namely, that the presence of resilience in individuals could lead to a type of resistance against stress and burnout (Edward, 2005; Gito, Ihara, & Ogata, 2013; Lo, 2014). Also found in the study, the higher levels of resilience reflected one’s reduced intensities of burnout. This highlights the significance of building resilience and incorporating it as a crucial component in academics’ day-to-day careers. This result is clearly supported by other occupations as well, in which Gito et al. (2013) found that nurses possessing higher levels of resilience were those more prone to experience less burnout. Like burnout, resilience is a complex interaction between the individual, the surroundings, and the culture (Wong, 2017). Nonetheless, the concept of resilience is still in its infancy in academia. Therefore, no data are available on the number of “truly resilient” academics. It could be inferred that training or professional development could be individualised to personal competence and resilience for academics who are in need of such support.

For engagement and resilience in contrast, a significant and positive relationship for both factors were found. From the survey responses, academics who reported a high level of individual resilience also mirrored a high level of engagement. As an academic’s resilience intensified, their levels of engagement towards work emulated the same pattern of strength. This supported the notion that resilience had a direct positive effect on work engagement, matching this study’s hypothesis that academics’ levels of engagement are influenced by their levels of resilience. Responses from participants revealed that most were very determined in their academic career, had self-discipline, constantly remained interested in their day-to-day duties, and perceived themselves as competent at handling many things at one time.

Results for research question 1 also contribute to the existing knowledge of burnout by providing some evidence of the mediating effects of burnout. From the final model attained, resilience was no longer a significant predictor of burnout and burnout affected engagement and demonstrated that burnout mediated the relationship between work engagement and resilience in this population of academics. Findings showed that high resilience eventually led to engagement by reducing levels of burnout (the facilitator). Put simply, when there is a lack of resilience, for academics to be in a state of engagement in their work (the desired outcome) burnout would, therefore, need to be reduced or be at the most minimised level. Similarly, other studies have found that burnout mediates the relationship between resilience (or other job resources) and burnout, respectively (Hakanen, Bakker, & Schaufeli, 2006; Roslan, Ho, Ng, & Sambasivan, 2015). This research extends our knowledge of the interplay between burnout, work engagement, and resilience and of the importance of understanding such concepts for academics in universities and emphasises that this is something that should be addressed and assessed constantly. It is thus vital that academics have the appropriate awareness so as to contribute to the neccesary interventions, for instance in dealing with issues encircling the whole burnout predicament and any other related issues arising with this idea. The present study provides us with knowledge to ponder with regard to ways of forming interventions to increase academics’ levels of resilience, their engagement towards work, and lessening their burnout.

All in all, the findings for research question 1 suggest the need to review the importance of the resilience and engagement in academics’ everyday careers, as it may hold multiple benefits for lessening the degrees of burnout and stress in the already competitive and demanding setting of academia. Results suggest that the presence of resilience and engagement can undeniably improve one’s well-being in the career so that it may consequently increase an academic’s performance and social advantages, as a whole. This corresponds to what Nel and Kotze (2017) highlighted that using these personal resources (i.e. resilience, engagement, etc.) more effectively is likely to improve an employee’s well-being, as well as for the overall organisation.

**7.3 Discussion of Research Question 2**

*What is the extent to which Malaysian university academics differ in their burnout and engagement levels across career stages and years of experience?*

It was shown that university academics in the ‘5 years or less’ experience group reported higherlevels of burnout than those academics in the more experienced groups. Interestingly, burnout was observed to be lessened by years of experience, with younger and less experienced academics appearing more vulnerable to burnout than their more senior counterparts. These findings were parallel with prior studies where individuals suffering from burnout were mostly the younger members of staff within an organisation or those otherwise lacking experience (Cordes & Dougherty, 1993; Hamdan & Hamra, 2017; Lizano, & Mor Barak, 2012; Maslach, et al., 2001; Plantiveau, Dounavi, & Virues-Ortega, 2018). This could be owed to the age factor which has been closely linked with experiences of work whereby burnout seems to be of a higher risk earlier in the career, compared to later in one’s life, as established by Maslach et al. (2001).

From the results acquired, academics at the start of their careers or in the Survival or Discovery stage (five years or less of experience) reported being the most emotionally exhausted, while academics in the later Establishment stage (i.e. 6 to 15 years of experience) came in second and those in the Advancement stage (more than 16 years of experience) reported suffering the lowest levels of burnout. A possible explanation for this may be due to senior or seasoned academics having a higher capability for controlling the demands of their workload or they may be more highly qualified, have been through ample experiences, and perhaps are far more competent with higher resiliency (Watts & Robertson, 2011). According to Hoare (2015), this ought not to be that surprising since older and more senior individuals have had many years of experience and familiarity with resolving problems and are seen to be sounder at controlling and managing their emotions in any given situation.

It is also probable that when it comes to novice workers or junior workers, more often than not, they have unrealistic standards that are seemingly impossible to achieve in actual work life (Cherniss, 1992). These novice workers tend to be more affected by feelings of failure in a situation with work excess and role stress, in addition to the incongruity between expectations and reality (Cherniss, 1992). Hence, such idealistic work factors undoubtedly contribute to placing newcomers in a vulnerable position for burnout (Djordjevic, 2010). Additionally, a subsequent crisis of competence among those new to the field and with less experience on the job is believed to contribute significantly to exhaustion, which leads to such burnout episodes (Gustavsson, Hallsten, & Rudman, 2010).

Younger academics, with ideal ambitious, are more likely than senior faculty to be burnout candidates, owing to the added pressures in the beginning of their career which at times coincides with other significant events in their lives, as many would expect older academics to have more skill and ease with managing time demands (Maslach et al., 2001; Poncet et al., 2007; Rudman & Gustavsson, 2011). These young faculty members face a closer age gap with those they teach (i.e. at the university) and for this reason there could be inferred some pressure and expectations from students in their own peer group, compared with the expectations those students place on the much older faculty members. Some authors have also speculated that, in comparison to prior generations of academic faculty, university academics today have to deal with the excessive and conflicting demands, such as publishing world-class research, delivering exceptional teaching, and juggling academic brilliance with administrative skills (Acker & Armenti, 2004; Winefield, Boyd, & Winefield, 2014; Ylijoki, 2013)

Innanen, Tolvanen, & Salmela-Aro (2014) are of the opinion that young employees tend to suffer added burnout because of the ceaseless tasks they are expected to complete during the initial stage of the career, when they are focusing on their academic profession and eagerly striving to flourish in their teaching and research as well. As a result, their emotions become increasingly exhausted with diminishing work enthusiasm due to the accumulation of heavy workload, teaching, and research expectations. Interestingly, it has also been found that older and married individuals faced less burnout than those younger and unmarried professionals (Alacacioglu, Yavuzsen, Dirioz, Oztop, & Yilmaz, 2009), this being true for the Malaysian academic sample as well in this study.

For some beginning academics, for burnout to be dominant in the initial period of the career was common. Some academics reported of instances when there arose feelings of uncertainty and self-doubt about their professional contributions, this made them work and progress even harder. These intensified efforts only led to them fuelling their physical and mental exhaustion, and, as a consequence, heightened their burnout levels. Other academics mentioned that exhaustion led them to face difficuties to perform due to feeling physically exhausted (reduced accomplishment). Results from the current study correspond well with previous research of burnout during the beginning career in various sectors (Beltman, Mansfield, & Price, 2011; Cranley, Cunningham, & Panda, 2016; Dicke et al., 2014; Dunford, Shipp, Boss, Angermeier, & Boss, 2012; Dyrbye et al., 2014; Ferguson-Patrick, 2010; Kelly & Northrop, 2015; Schaefer, Long, & Clandinin, 2012).

From the MANOVA results, statistically significant associations were identified between years of experience and academics’ work engagement and resilience levels, indicating that academics with more years of experience exhibiting higher degrees of work engagement and higher resiliency. From a life span viewpoint, this could be owing to the fact that academics in this group are nearing retirement, hence, they do not need to prove themselves any longer, are more comfortable with their position, lack work stress, and have adjusted far better to the difficult academic environment. Other research has found that adults more senior in age were more adaptable in adjusting their coping responses and resilience with the surrounding situation (i.e. controllability) than their junior colleagues (Aldwin, 1991). Supporting findings of Brandtstadter and Renner (1990), older individuals tend to reveal a coping style that was accommodative in the face of hardship or failure in contrast to their young equals, in that older individuals were seen to be more flexible and better at adapting to changed situations than young adults.

Nevertheless, caution ought to also be taken with these findings, due to the fact that this current sample could possibly be from the group of academics who have higher levels of resistance and resilience, the manner through which they had tolerated and survived the profession. Another view worthy to be pointed out is from Kwiek (2017), who he claims that the young and old academics born in different academic periods, having to work with different career scenes and following dissimilar academic norms, would without doubt develop different styles of coping when dealing with pressures and demands, despite sharing similar experiences that characterise their working life (e.g. burnout, publication pressure, work demands). With the current Malaysian sample, such shared experiences may mark each one of the Malaysia academics quite uniquely and, as a result, most of them would perhaps display variants in their conduct and intellectual abilities upon reacting to certain stressors or challenging situations (Schuster & Finkelstein, 2006).

**7.4 Discussion of Research Question 3**

*What are the identified changes of burnout, engagement, and resilience across one semester among Malaysian university academics?*

The aim of this study was to examine the changes in academics’ burnout through a 14-week period and in particular, to observe variations in their accounts of burnout over the one semester. This research question expands the knowledge on the burnout-work engagement association longitudinally in the within-person level context. As work engagement and burnout both display both dynamic and static qualities over varying time frames (see Makikangas, Kinnunen, Feldt, & Schaufeli, 2016), the person-centred approach used here can produce unique insights. In general, the developmental burnout profiles for academics were divided into two types: half of the sample displayed a constant and unchanging level of burnout throughout the one semester, whereas the other half exhibited fluctuation, increasing and decreasing in their burnout levels. In line with earlier research, it was found that employees typically would report a stable range of low levels of exhaustion, though through a longer time span (Makikangas et al., 2016).

In recent years, burnout research has identified a number of work setting and motivational determinants of burnout.Yet, not much is known in terms of how the correlates alter over time or how this predict changes in academic burnout. One of the goals of this current study was to examine such stability and change of burnout in a sample of (*n* = 12) Malaysian university academics from three waves or time points with a month interval in between each wave. This present study makes a few theoretical contributions to the literature. First, it draws attention to the intra-individual changes in burnout over time, in addition to also revealing that even though burnout may be relatively stable and unwavering for some particular academics, others underwent more (or less) varying degrees of burnout over the 14-weeks period signifying interesting results due to burnout has classically been viewed as rather constant and unchanging over time (Makikangas et al., 2016; Maslach et al., 2001; Schaufeli, 2003).

Secondly, the present findings contributed to prior longitudinal studies that reveal patterns of change in burnout components at the individual level. More importantly, they emphasise the fact that changes in burnout are predicted by changes in academics’ perceptions of the institutional (university) scene as well as other factors (i.e. individual, interpersonal, organisational, and systemic). The inclusion of such categorical variables, i.e. years of experience and career stage, also reveals that women and those with fewer years of experience in the field tend to become emotionally exhausted over a semester. Over the course of the semester three individuals (n=3) out of the 12 participants demonstrated improvements in burnout levels (from the baseline, i.e. in January 2017 at the beginning of semester). For both genders, burnout decreased for most academics after the first time point, and remained stable after the second wave (except for two academics who saw a decrease and increase in their burnout levels, respectively) (see Table 7.1). The prevalence of burnout was seen as more unstable among female academics than male.

Table 7.1. Participants’ levels of burnout across 14-week period

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Interviewee | Participant Code | Levels of Burnout | | | |
| T1  Jan 2017  (Beginning of semester) | T2  March 2017  (Middle of semester) | T3  May 2017  (End of semester) | Burnout patterns across 14  weeks |
|  | Participant 1 | H1 | High | High | High | Constant |
|  | Participant 2 | H2 | Medium | High | High | Increasing |
|  | Participant 3 | H3 | High | Low | Low | Decreasing |
|  | Participant 4 | H4 | Low | High | High | Increasing |
|  | Participant 5 | H5 | High | High | Low | Decreasing |
|  | Participant 6 | H6 | Medium | Low | Low | Decreasing |
|  | Participant 7 | M1 | High | Low | High | Fluctuating |
|  | Participant 8 | M2 | High | High | High | Constant |
|  | Participant 9 | L1 | Low | Low | Low | Constant |
|  | Participant 10 | L2 | High | High | High | Constant |
|  | Participant 11 | L3 | Low | Low | Low | Constant |
|  | Participant 12 | L4 | Low | Low | Low | Constant |
| Total | | | H=6  M=2  L=4 | H=6  M=0  L=6 | H=6  M=0  L=6 |  |

Note. H1 = First participant in the High burnout group; M2 = Second participant in the Medium burnout group, L3 = Third participant in the Low burnout group, etc.

Generally, what was observed was an improvement in the burnout status of academics between the beginning of semester (T1) and at the middle of the semester (T2), while between March 2017 (middle of semester) and May 2017 (towards the end of semester) (T3) the situation seems to be unchanging (stationary). These developments might partly be explained by several reasons, such as academics having adapted to the surrounding environment and learning coping strategies to manage themselves against burning out, being emotionally insecure, etc and with the fact that most job settings do not change dramatically over time (Leana & Barry, 2000).

Looking at the changes of burnout from an individual level, the developmental patterns across a 14-week period exhibited equally in terms of stability and change, as there was a mix of academics displaying positive change as well as negative change in regards to their burnout levels. Academics within the Low burnout cluster showed, undoubtedly, the highest rates of stability in regards to burnout levels, strengthening the finding that burnout is a chronic state and relatively little change occurs over time (Bakker, Schaufeli, Sixma, Bosveld, & Van Dierendonck, 2000; Toppinen-Tanner, Kalimo, & Mutanen, 2002). For those in the High burnout group (*n* = 6), the majority displayed a developmental pattern of change of a constantly decreasing level of burnout nearing the end of the semester. Three academics exhibited a decreased level of burnout from the first (T1) until the third stage (T3), whereas two academics demonstrated an increase in their levels of burnout nearing the end of the 14-week period. One academic in this cohort maintained a consistently a high burnout level throughout the whole semester. This finding, given academics’ profiles of instability, could indicate that numerous facilitators and inhibitors leading to burnout were at play to influence these individuals, due to some individuals developing burnout whilst others developing engagement (to be further explained in the subsequent research question). Findings from the interviews showed that academics with higher initial levels of burnout (from Time point 1) described more physical health complaints and emotional responses throughout the 14-weeks, including lethargy, fatigue, headaches, anxiety, dread, and anger. This supported the view of previous studies where higher levels of burnout were found to lead to a faster rate of decline in physical health, such as the study by Kim et al. (2011) of burnout and physical health among social workers.

Interestingly for this present study, the changes in academics’ experiences across the 14-weeks period revealed gradual negative changes that finally gave way to a prolonged negative experiential state. This was interpreted as a reflection of burnout, as defined in the extant literature. Academics who grew to become more positive over the course of the semester from being in a negative state were also observed. These contextualised reports of variations and change, whether positive or negative may provide us the understanding of the progression into burnout or otherwise engagement and better resilient levels as reported by some academics; where they conveyed having to endure feelings of exhaustion, the lack of achievement, and feeling depressed towards work which mirrror other past research (Cresswell & Eklund, 2006). Other academics also testified their extreme high expectations of themselves and indicated that this frame of mind negatively affected their work performance and well-being during the job and after returning home as well. Academics commonly ascribed their chronic negative states to more than one burnout-related factor. Although the list in Appendix D titled Themes and Subthemes of the Lived Experience of Academics with Burnout during Time Point 1, 2 and 3 is designed to represent the identified elements that influenced academics’ burnout and experiences mentioned in the interviews it is by no means an exhaustive list.

At the group level, T1 (the beginning of the term) witnessed the highest reported rates of burnout among academics, which gradually decreased over the course of the 14-weeks. At 10 weeks (i.e. into the middle of the semester) a decline in burnout levels reported by academics was captured. It seems possible that these results were due to some academics mentioning their personal strategies and coping mechanisms to elude conflict in such ways as getting away to cope with the burnout. Some individuals even began to display an adaptation or inhibition towards burnout and learnt of being under constant exhaustion and assimilated with the struggles burnout entailed. Some academics also pointed to the high-stress university setting becoming much better and improved compared to during the first time point (where it was mostly hectic and the workload was of too much to bear).

Cases of academics adaptation toward burnout were closely associated to their perceptions of the accessible situational and personal resources. For instance, one academic felt less burned out and more driven due to having received encouraging appreciation and gratitude from those around him (students, family, and friends) (see previous chapter, Theme T3.2: “Male, H3 T3”). While two other academics reported their ability to manage things better (i.e. focusing on one thing at a time) and organizing work around their working hours (see Theme T3.2: “Female, L3 T3” and “Female, H2 T3”). Positive adaptations defined by academics also comprised of positive reassessment, trying to deal with the problems, and imbuing common events with constructive meaning. This finding also mirrored what was found in previous studies (Folkman & Moskwitz, 2000). Alternatively, adaptations that were not of academics’ effort rather typically as situations have turned out better; for example, one academic saw a reduced level of stress levels and burnout simply due to the resignation of her Head of Department and the result that she would no longer need to engage with her and could avoid her altogether.

Lai and Wiggins (2003) reported a direct linear increase in burnout across time of their sample of athletes. Data from this current study also provided time dissimilarity in regards to burnout; however, the present results vary in two important ways. Foremost, the patterns observed in this study suggest that time variation in the experience of burnout is perhaps not adequately captured in terms of a simple linear trend as some academics reported burnout being static at some point, while others reported an increase, others decrease, and fluctuations also occurred during the 14-week period. Second, the changes observed over time differed from that of Lai and Wiggins (2003) due to them measuring the burnout construct in terms of a quantifiable score based on a measured instrument, something not quite apparent in studies utilising a qualitative measure of burnout like this one, due to “burnout” in a qualitative study being more experiential in nature, hence, being more complex and multifaceted.

Generally, the developmental burnout profiles acquired in this study offer a clearer picture of the stability and change in burnout and work engagement of the 12 included Malaysian academics. Whereas past burnout studies have all focused mainly on workers and personnel in the initial stage of the career (Hultell, Melin, & Gustavsson, 2013; Rudman & Gustavsson, 2011), a stage notably known for being turbulent (due to changes in levels of well-being), the developmental profiles identified in the present study captured employees in other stages of the career as well, not merely those beginning their careers but also those in the Establishment (i.e. 6 to 15 years of experience) and the Advancement or middle career stages (16 to 25 years of experience) as well.

**7.4.1 Academics who did not report burnout**

The experiences of academics with no reports of burnout phases or who had very low levels of burnout provided contrast to academics with phases of experienced burnout. Even though having to go through similar occasions, these participants always stated positive and constructive feelings throughout, “Some people can be stressed out because of the expectations of the university, the KPI and being overwhelmed by the university requirements. I’m not really stressed out. It’s about your job and commitment” (Male, L4 T1) and “Usually I would try to see the good in every situation” (Female, H5 T1). Specifically, these non-burnt out academics reported savouring the challenges and goal attainment, and cherished their academic careers. For example, one academic described the added workload and novel duties as a welcome challenge: “You just have to commit. Sometimes you’ll receive subjects that you don’t expect but make the most of it. And even though students’ expectations sometimes causes you pressure but it makes you work forward” (Female, H5 T1).These academics deemed their optimistic experiences were due to, mainly the constructive social support they received, the open and accessible communication with superiors, colleagues, and those they work with, and constant involvement in positive and pleasurable activities and gatherings outside the job. One academic shared that her physical exercise routines outside of her academic career aided in reducing such stressful phases: “I don’t have stress. If I did, I’d take it positively. I do have my own way to de-stress- I go for exercise. I look forward to every afternoon to play badminton” (Female, L1 T1).

In the present study, accounts from academics who did not experience burnout were used to contextualise the experiences of academics who did. Due to the considerable individual differences between those burned out academics with those non-burned out academics, comparisons and the data ought to be interpreted carefully,among them, differences in the way academics evaluated certain situations. For academics who did not experience burnout, upon being faced with comparable circumstances, they were more inclined to consider the situation as a mere challenge, looking at it from a more positive aspect. While for those burned out academics, evaluating a situation in a negative light was more likely. On the whole, academics attributed burnout-related experiences to, in most cases, a burdensome amount of work, a lack of means, supervisory conflicts, overwhelming job demands, unreasonable expectations from the university, poor relationships with students, conflict with personal values, and high self-ideals. Academics who did not undergo burnout episodes ascribed their positive experiences to, among other things, having a very supportive circle (colleagues, peers, and family), being treated fairly by upper management, being passionate about being an academic, infusing spirituality in their daily routine, and adding positive drive in and outside of their academic careers.

Towards the last time point (May 2017), the total number of academics suffering High burnout were, *n* = 6, Medium burnout, *n* = 0 and Low burnout, *n* = 6. At 14 weeks, in general, burnout showed improvement across the three-time points and, interestingly, all participants belonging in the Low burnout cohort (*n* = 4) (i.e. Participant 9 - Participant 12) exhibited steady, unswerving levels of burnout throughout the whole semester. The current study covers a time period of 14-weeks and, while some may argue this is seemingly a short period for a longitudinal study, the time span was long enough for clear changes in burnout to be detected. Moreover, this study scrutinises experiences of burnout from a fundamentally different angle, to be exact, from the lens of a detailed qualitative view of the intra-personal experiences of burnout amongst university academics in Malaysia.

**7.5 Discussion of Research Question 4**

*What factors do Malaysian academics identify as influencing their burnout, engagement, and resilience levels?*

In the following paragraphs, the challenges faced by academics and what influenced their levels of burnout over the semester are explored in detail. During the narrative process, themes that emerged provided a rich depiction of academics’ viewpoints in answering this particular research question. For this question, results are discussed in terms of their integration with Bronfenbrenner’s Ecological Systems Theory (1979) and will be explained and reflected on through the lens of this theory. This framework was chosen to represent the environmental influences that capture the complexity of the university academics’ everyday experiences of burnout. The five systems of the ecological model were used as an outline and framework to investigate and describe the factors that influence academics’ burnout in a more organised manner. As such, the different layers of the model are described and examples are taken from participants’ transcripts, linking them with the associated literature to provide support to these arguments.

**7.5.1 Microsystem influences on academic burnout and well-being**

The academics in this study alleged that their burnout was influenced by microsystems, including that of the university atmosphere, the home, social support groups, peers, and colleagues. Most academics also recognised the value of focusing on oneself within the microsystem as one’s identity development were influenced by the skills, knowledge, capacities, and confidence within the university setting. A constructive and professional self was believed to be vital for triumph and self-esteem as an academic. Being under constant scrutiny by parents, students, and staff, was deemed to be a strong influence on one’s self-concept and burnout by many participants. Participants defined the significance of sustaining positive enthusiasm continuously so as to evade burnout breakdowns and to move forward: ‘…trying my best to stay positive and healthy’ (Female, M2 T3), ‘Usually I would try to see the good in every situation’, and ‘practicing positive thinking, that’s how I cope these days,’ whilst also promoting self-improvement ‘I try to plan my work better’ and ‘…it’s a bit of multitasking but I’m learning’. As well as having something to look forward to ‘I look forward to this year’s promotion. That somehow gives me a booster!’ (Male, L4 T3).

Participants also described the role that they needed to play in taking control and regulating themselves in order to fight burnout. This, according to Schmeichel, Vohs, and Baumeister (2003), included the ability to regulate emotions and not be easily influenced by highs and lows, as can be seen in the example excerpts below,

I used to believe I should be a perfectionist, but I think I should tone down (Male, L4 T1).

I always believe that one day the system and policies will change. As of now, I need to take care of myself (Female, M2 T1).

According to Higgins (1996), educators make use of self-regulatory strategies by comparing themselves to the standards of others, and as a result of this, elicit varying emotional responses. Matters relating to the, physical, cognitive and emotional nature of the job encompassed the constant exchanges with other individuals, persistent responding to questions, being assessed, getting and giving instructions, and also feedback (Higgins, 1996). These day-to-day tasks necessitated these educators to be “fit” within a health notion, and to be sound emotionally (i.e. free from burnout). This supports Cross and Hong’s (2012) description of the emotional requirements of educators within the microsystem due to the multidirectional and reciprocal interactions between students, staff, and parents. An educator’s ‘behavior, thoughts and actions are influenced by others in the microsystem, so too are others affected by the individual’ (Cross & Hong, 2012, p. 959).

Finding the time to exercise and maintain a healthy level of physical fitness was also critical to an academic’s well-being and was deemed essential for participants in this current sample. Other coping strategies and skills reported by academics in combatting burnout included maintaining strong communication and support from colleagues (being in a good and reassuring work environment), having close family ties at home as well as spousal support for their career, allowing a positive mental attitude towards burnout and stress, rejecting any negative mental traits such as anxiety, panic and pessimism, and knowing when to place limits and distance themselves from work. These strategies promote positive interactions, rejuvenation, positive outlook, good character, and overall well-being. Hence, in addition to participating in exercise and physical activities, academics who are “fit” required good coping mechanisms to preserve their well-being. When academics felt mentally burnt out from juggling multiple demands at work many would utilise one of these strategies to recharge themselves and rebuild the lost enthusiasm.

Within this immediate university microsystem level, academics exist with very intricate connections between individuals, and the nature of these connections has an impact on self-development (Bronfenbrenner, 1979). The key influences on the effectiveness of the academic world centre on social connectedness which includes building joint and mutual relationships, and maintaining professional relations with office peers, as confirmed by one participant: ‘I’m quite lucky to be posted at this university because I came and many young lecturers came too. We formed a very close bond. I just need to rely upon this group of friends, they can give their commitment’ (Female, L1 T1). These academics were keenly mindful of the prominence of connecting with colleagues in the workplace, acquiring from senior and experienced members of the faculty, seeking help from others, and having someone to depend on.

Academics from the sample also perceived support from mentors and superiors as very essential in encouraging an optimistic value of the self and being acknowledged of their ability, skills, and effort. Many academics reported the benefits of being able to openly discuss their problems and burnout with their superiors and to be able to learn from such figures. This, according to Stokes and Wyn (2007), recognises the impact of learning in the workplace and how it can promote an individual’s identity formation. This also aided in preventing levels of burnout from worsening. On the contrary, for academics lacking care and support from superiors the inclination to burn out was greater, as mentioned by one participant: ‘I don’t have a positive relationship with the Dean… I don’t have any good communication with him…this makes me more burned out’ (Female, H1 T1). University procedures were also factors which gave tremendous influence towards the well-being of the academics in the sample.

Academics further revealed the nature of the socio-emotional aid they received at home from their spouses (though few of them were academics themselves they seemed to understand the stresses of the job). The benefits of coping assistance in the form of spousal support on the reduction of burnout in these academic staff has also been the same for previous studies where it was found to evidently lessen discontent and burnout (Aryee, Luk, Leung, & Lo, 1999; Gottlieb, Kelloway, & Martin-Matthews, 1996). Alternatively, academics who were not married tended to confide with a close member of the family; clearly demonstrating the significant need for support outside of work.

**7.5.2 Mesosystem influences: Interrelationships and connectedness between microsystems**

Bronfenbrenner’s (1979) explanation of a mesosystem as “a system of microsystems” helps put primary attention not only on the presence of these microsystems but then again, essentially, the interplay of the microsystems together, interactions with the academic and the impact of such interactions. Due to the interviews focused more on the academic within their workplace context; access into the other microsystems was quite restricted. When it came to the lingkages between home and work contexts, academics’ accounts were, thus, typically limited to how their university’s work values and ethics impacted patterns of behaviour and organisation in their home and social contexts. Some academics lamented on how too much work impacted their life outside the job, at home and social lives, leading them to always complete work after working hours clearly demonstrating the overlapping of the various arrays of one microsystem into other microsystems and how this affects the individual’s involvement in them and the interaction with members of the family and friends as well.

Possibly the utmost noticeable mesosystem was the association between workload management of work with that of the home microsystems. The mutual connection between the work and home microsystems across academics in all intuitions and across both genders was in fact the workload/time constraints and the work-home life balance issue. Because of the excessive and impossible amount of work, majority of academics suffered time constraints resulting in these academics having to continuously bring work back to the home. This adds further strain to these academics’ private lives by preventing them from having proper and sufficient recovery time at home and, as a result, they were not fully prepared (either mentally or physically) for the challenges of the next day. A constant repetition of this pattern could eventually lead to negative outcomes in the job and may result in academics feeling fatigue and even more burnt out.

Academics’ transcripts revealed on how academics’ faced overlapping when it came to the involvement of the various microsystem having an influence on one another, particularly where work overlapped from university to the home and vice versa. Accounts given by respondents demonstrate how their work life had an influence on their home life and it was the influence and interwining of both of these microsystems that academics felt most impacted. One academic felt that the academic job seemed to be constantly building up to an extent that ‘Every day is filled with everything. In fact, I usually come early to the office. I’ll be the first person to arrive and I’ll be the last to leave. It’s very challenging’ (Female, H5 T1), and yet upon coming back from work, even more work had to be done at home.

Another participant presumed that the academic career was, thus, ‘mentally exhausting’ (Male, L2 T1), whereby another quoted as saying, ‘I know it’s not good to bring work home but sometimes we don’t have a choice. If you don’t have enough time to finish your work at the office, that’s the last choice’ (Female, H5 T1), hence, a constant overlap was always there between the home and work life. These cases indicate that home life intertwines with work life or in other words having an important linkage between microsystems, as stated by Larrivee (2012).

For some academics bringing work back to the home facilitated them in meeting certain workloads, which was already overloading them. For others in the sample, their decision to use “getting away” strategies or to distance themselves from work once in a while as a reassuring approach to deal with work stress; supporting what other researchers have stated in that it is imperative to recognise certain means which can aid individuals to switch off mentally and separate oneself from strains and pressure of work (Bakker, Rodriguez-Munoz, & Derks, 2012; Sonnentag, Unger, & Nagel, 2013). Academics with family tend to feel more affected with their home life owing to not ‘hav[ing] a choice’ and not ‘hav[ing] enough time’ (Female, H5 T1) to complete their work in the workplace and having the need to complete it during hours intended to be spent with their children.

Some academics mentioned that after working a full day all they wanted was to return home and spend time with their family but that they were unable to do so. In addition to that, they would only want to feel relaxed and happy to be with their spouse and children after leaving work, not wanting to think about the office anymore. Many participants reported bringing work back to the home, impacting their participation in their social microsystems. One academic, indicated of the various aspects of his job, the most stressful were rising expectations, getting results, Pressure to publish, unattainable targets, and the insufficiency of time given to complete projects. As described by one female academic, doing work at home disrupted the interactions and relations with their family and guilt would usually take over. Due to her principle that full attention ought to be dedicated to her children upon arriving home, habits like bringing work home influenced the interactions between mother and child. This is one illustration of how one’s participation in one microsystem impacted the involvement in another as explained by Hartney (2008).

While the roles, activities, and social affairs of academics in the university microsystem have an intricate effect on their health and welfare, these influences are compounded across interrelations between systems of microsystems including friends, family, and networks which form the mesosystem (Bronfenbrenner, 1992). Supporting Smith’s (2002) notions of belonging, academics in this sample had the need for connectedness and belonging across these settings to feel well and “fit”. Academics’ emotional connectedness to the university microsystem did, however, conflict with their beliefs that “it’s not good to bring work home.” One participant described,

I feel that I cannot do my work at home because I feel really guilty. When you’re at home you need to look at your son’s homework. My son needs my attention. (Female, M2 T1)

This exemplifies the intricacies of the nested nature of the ecological systems theory (Bronfenbrenner, 1979) and how it is crucial for an academic to aptly know how to balance not only the diverse relationships included within the mesosystem, but also the intricate emotional responses associated with it.

Connection with those outside and within the university was an important stimulus in forming balance between the family, the home, work peers, and the career as an academic. Many participants employed proactive steps and strategies, for instance avoiding any combination of work and home during weekends, in other words separating weekends from work days, as conveyed by one respondent, ‘You’ve spent 7-8 hours per day at the university. I don’t think it is fair for yourself. It’s not healthy’ (Female, M1 T1). Empirical evidence from past studies strongly supports the role of job demands (e.g. work–home conflict) and job resources (e.g. from others, job control) in predicting burnout (Schaufeli & Taris, 2014). Some academics faced conflict of values and morals in regards to the home and job contexts (i.e. the university), eventhough many did try to avoid such to occur, many a times it was difficult to avoid, ‘I know it’s not good to bring work home but sometimes we don’t have a choice. If you don’t have enough time to finish your work at the office, that’s the last choice’ (Female, H5 T1).

In regards to connection to friends and attachment, this was also a frequent theme emerging among academics. Many academics considered maintaining current friendships as very significant and having the time to spend with friends was essential to contentment and helped in lessening burnout. Having an active social life and engaging in hobbies such as sports and traveling also contributed to positive temperaments. For others, a spiritual connection with religion provided added comfort, serenity, and a sense of bliss in their everyday life.

This being said, there could be instances where some academics in this sample are not reporting or revealing the impact of work had on them. This mirrored a study conducted by LaMontagne et al. (2006) of workplace stress, describing incidences of it being underreported. There could be a known stigma or some academics in the sample may have very high standards for themselves and would, thus, have stopped reporting any experienced burnout for fear of being labelled incompetent. Academics’ unwillingness to reveal the extent of work stress on the job within the institution further complicated the outlook of burnout among these academics.

**7.5.3 Exosystem influences: Organisational and contextual unit**

Other themes emerging from the interviews were that of an organisational nature which relates to the organisational unit where academics are working (public-research universities, public non-research universities, and private universities) falling under the exosystem level or indirect environment.

Despite the nation’s committed objective in achieving such high ambitions, many academics report particular policies, working practices, and prominent persons that have acted as organisational-level facilitators and inhibitors within the institutions and have added or mitigated their levels of burnout during their academic career. Such influences are more complex as organisational factors like these are outside of the academics’ control (Bronfenbrenner, 1979). It involves the various faculties, employers, organisations, government, agencies and international associations, indirectly making decisions impacting academics’ in the workplace. All these have equal positive and negative implications. As conveyed by the university academics in this study, most of them perceived they were affected by the demands of workload, changing nature of the profession, legislative reforms and modifications in policies and procedures which added stress, pressure and apprehension to their daily careers.

Academics’ frustrations with the lack of basic necessities and resources provided by their institutions (for all public and private universities) was conveyed as one very major hindrance to performing well in their work, having to cater and search for resources themselves which aggravated and sped up the burnout process. University management failing and not giving much emphasis to staff training was another organisational-level facilitator of burnout for these academics. Participants mentioned in their interviews the ‘unseen’ activities that senior management members and faculty were involved in, for example, cronyism, abused promotions, mishandled funding, etc., which intensified their levels of burnout in their careers.

Many academics also expressed their displeasure when it came to judgments related to assessment and performance indicators, employment standards, job security, quality and accountability, unfair recruitment and pay policies, unfit workload, acknowledgement, professional development, and mishandled promotion which significantly gave an impact on their identity development, learning, sense of individual value, and career suitability within the system. Academics’ felt that influences on their burnout level and well-being as a result of exosystem influences suggesting feelings of worthlessness, disempowerment as professionals, and feeling unappreciated, similar to those conveyed in Daniels and Strauss’s (2010) study. Additionally, being given multiple roles and added responsibilities beyond one’s work scope and capability added more burnout. Problems occur when such duties (mostly administrative tasks) take even more time to execute than focal obligations, which academics perceive as causing further strain. In general, academics were most likely to identify and report facilitators of burnout at an exosystem layer than at any other layers.

Academics in this study felt they were being affected by the economic changes as affecting the Malaysian higher education spectrum, having a huge impact on their personal livelihood by placing additional burdens and anxiety on their lives. For some academics the advances in information communication technology and accessibility to worldwide information were considered very stimulating, but to others the roll-out of technological changes to universities in Malaysia, where they are supposed to embrace the changes (as soon as possible), renovate themselves by applying the new technology in their teaching and research, e.g. MOOCs (massively open online courses), and to brand themselves to fit ‘niche’ markets in a context which they are unfamiliar with was conveyed as a significant issue complicating their well-being and contentment at the university level. This matter did not help in that there was continually a lack of available resources and individuals they could refer to, and the absence of such necessary mentors and advisors to cater to their queries and seek guidance from made the circumstances worse.

For academics, the perceptions of being surrounded by demanding and struggling economic situations and having no means of basic assets (i.e. appropriate training, equipment and teaching facilities, mentors, and other professional services) made the presently stressful scene of academia more dire. Academics who had earlier mentioned their inclinations and drive in executing their job efficiently were left exasperated due to the inability to do so due to the abovementioned reasons.

**7.5.4 Macrosystem influences: Overarching societal beliefs and values**

At the macrosystem level, the vast social system whereby the individual does not interact directly comprises occurrences and events that arise, which thus produce impact on the individual’s immediate setting (Bronfenbrenner, 1979). Such occurrences would include the changing nature of the contemporary academe, meaning the competitive audit culture, marketization of higher education, and neoliberal capitalism.

For academics living in Malaysia, in terms of its cultural context, Malaysia is popularly referred to as a multi-ethnic society (Embong, 2002) with the existence of diverse ethnic groups, including the Malays, Chinese, Indians, Ibans, Kadazans, and ethnic minorities such as the indigenous people or Orang Asli, who have played an important role in shaping Malaysian history. As previously mentioned by Hofstede (2012) in the literature chapter, Malaysia is known for its high score of 100 in the Power Distance dimension in that individuals have a trend of accepting hierarchical order and every individual has a place in society and within an organisation, and hierarchy is understood as reflecting integral inequalities where centralization is very widespread. This is a culture where subordinates are likely to given orders and they are expected to execute them with no questions asked to which in some western cultures is nowhere acceptable.

Hence, with all the educational processes at the national level being envisioned and hailed by the NEP, academics in this present study were increasingly bombarded with concern of societal views and their beliefs in regards to the academic career and the overbearing expectations from the national level have created an impression on their personal value and self-respect as a whole. This supports Cross & Hong’s (2012) view in describing how changes within the macrosystem tend to significantly impact the other environmental levels. The perceived waning in the social status of academics was considered to lower societal ideals and attitudes about academics. At the present time, complex demands are being placed on the shoulders of these academics to provide teaching of the highest quality, conduct world-class research and publication, meet high academic standards, not to mention to educate students during challenging times, as students are now classified as sought after “clients”, no longer merely learners, and the ultimate goal is to continuously satisfy these “clients” (Thornton, 2013).

Cruickshank (2016) notes that higher education at present, instead of being regarded as a public good as it was previously, has now become a severe commodity or business venture. Cruickshank (2016) also gives highlights of anecdotal evidence from academics that, owing to the various incremental increases in university fees, students who see themselves as eligible customers tend to portray a more difficult and demanding demeanour. From interviews conducted for this study, we can see academics testifying to the demands of students in the contemporary climate of neoliberal capitalism for instance, ‘…Nowadays, students they take things for granted with their attitude’, they also report them ‘…not waking up for classes, not focusing’ (Female, H2 T1). Another academic commented that the high expectations from students would jeopardise his own sentiments of self-worth,

I want to make sure my students get the best out of my lecture but sometimes you’re not prepared. I would really feel down if my students give that ‘Look’, that they’re not happy. You can tell from their expressions and you can tell if you’ve delivered successfully or otherwise (Male, L4 T1).

Local influences affecting universities and their broader communities upon the introduction of the Research University concept were also perceived to have a huge impact on academics’ burnout levels and well-being. As one participant described it, “…When they introduced the concept of Research University (RU), the burnout started, the whole paradigm changed, the KPI changed too…” (Female, H6 T1). This resulted in many of the academics undergoing increased stress at home, strain, changes in workplace conduct, and a decline in their levels of engagement. Furthermore, academics’ emotional involvement in their career too was affected, due to the unyielding challenges, additional demands from university administration, and feelings of failure for not meeting the KPI standards.

Linked to this RU concept, academics also frequently conveyed the demands of the KPI as their main burnout facilitator at this Macrosystem layer. Participants commented on the endless competing demands on the system and the struggle to achieve KPI requisites while simultaneously settling into their challenging roles each term (new sets of students, laborious syllabi, securing grants, etc.). For junior staff, prior to gaining tenured status having certain competencies assessed was perceived as extremely taxing and facilitated increasing levels of burnout.

Questions also arise as to the extent the nature of academic work is changing these days, and to what degree it truly induces work-related strain and pressure. With the constant evolution of academia and the introduction of metrics and datafication modern technological trends have turned many aspects of the academic working life into computerised data and have transformed these data into new forms of value or metrics to assist in such standings and assessment (Cruickshank, 2016). The question right now is: Do these metrics actually work? Do they actually measure what they are trying to measure? And are they actually fair? Or are they over-used? Today, metrics play an immense role in most occupations and are used to measure individual achievement and successes (Cruickshank, 2016; Feldman & Sandoval, 2018), yet these numbers can be surprisingly seductive. With such dependency on these metrics and datafication, mishandling or even over-usage can incite and prompt stress-related tension and burnout among vulnerable individuals at work. The revolution of the university from a public good into a market-oriented commodity has had another important effect. University degrees are now valued as qualification assets when it comes to the future income expectations and employment security they provide for their holders. This standpoint of higher education is not new as it is linked to the concept of “human capital” and the self-entrepreneurial individual, rendered directly responsible for his or her own success in life (Cruickshank, 2016; Feldman & Sandoval, 2018).

Academics reported on how their identity as educators was sometimes marked by societal views when they were publicly judged and assessed in terms of solely their performance and accomplishments on the job. To what extent these systems and assessments impact the individual academics? And how does today’s metric culture and the neoliberal idea of knowledge production affect the academic practitioner? According to Feldman and Sandoval (2018), these questions and pressures reflect the extent to which metrics now dominate the existing university.

Many academics lamented that it was due to the KPI and the concept of RU that their performances were affected, and that this caused them to suffer from burnout from the unbearable demands and expectations. To one academic, the KPI was constantly changing, and the goal was always changing as well. Most academics also noted that it is in relation to research that they felt under most pressure, for it is here that the “worth” is most harshly assessed and where they are subject to ever greater scrutiny. It is not just a matter of whether you publish, but what you publish, where you publish, how often it is cited, and whether it has an ideal impact factor. In other words, today’s academics are expected to do much more than those in previous generations were (Gill, 2016). It comes as no surprise that stress, fatigue and burnout are featured so prominently in contemporary accounts of what it is to be an academic in higher education today.

This is a good illustration of how Campbell (2012) claims that everything one does ought to be measured, and only the things that can be measured, counted and ranked are in fact the things that mattered. Under current neoliberal reform, the culture of universities in simply measuring, and the reduction of its mission to the interest of the market, rests on the secularization process that strengthens and informs neoliberal reform philosophy. In simpler terms, Wendy Brown describes neoliberalism as ‘a peculiar form of reason that configures all aspects of existence in economic terms’ (Brown, 2015, p. 17). In countries such as Britain, where metrics-heavy assessments of universities are profoundly used, individuals are prone to feel more content and rewarded for giving quantity over quality and, thus, will in whatever way possible, modify their behaviour to match such aims (“Assessing Assessment”, 2010). This has become, to some extent, the journey for Malaysia’s education scene as well.

Neoliberalism is characterised by the growth of individualization, being clear of government interference, and fosters the establishment of market logics and wisdoms in the domains of everyday life (Feldman & Sandoval, 2018). Everything has now become mere competition for universities. As such, academics have much anxiety and constant exhaustion as their work in universities is no longer envisioned as the production and dissemination of knowledge for its intrinsic use value per se, but in its place as catering to the conceptualization of knowledge production as an inevitable part of business and corporate interests. (Cruickshank, 2016).

In this new atmosphere there is every reason for university management to adopt the methods and cultures of corporate institutions (Cruickshank, 2016). Recent changes in academia have led some to claim that neoliberalism, shaped by organisational tactics that are in constant target to assess individual performance and output by means of “metric power”, is transforming academia into an increasingly insecure place for work and study, not to mention a place in breed of endless competition (Berg, Huijbens, & Larsen, 2016). Where most parties are not entirely against the nature of the neoliberal philosophy as a whole, the neoliberal audit systems have triggered even higher levels of apprehension, stress, and mental ill-health problems among university academics and students alike (Bal, Grassiani, & Kirk, 2014) and in most cases produce work-related pressure, trauma, and burnout in them due to the stress of trying to keep up with the pack (Berg et al., 2016; Cidlinska, 2015; Feldman & Sandoval, 2018).

The main outcome of all this is none other than the voicing of exhaustion among faculty members, a consequence which is under-theorised in the language of universities. Some dispute that as a substitute of the development of exceptional and motivated human resources and excellent research and teaching, they in fact produce anxiety, burnout, and premature departures of early career researchers, specifically women (Cidlinska, 2015). Responses by dissatisfied academics ranges though, where some choose against an academic career others adopt a strategy of individual withdrawal within the system by protecting their spaces of independence, i.e. refusing to engage beyond the officially required minimums and so on (Feldman & Sandoval, 2018).

This issue is parallel with what respondents from this current study have also revealed, that evidence for a shift to this neoliberal academy within the Malaysian context is without a doubt increasing. The Malaysian transformation plan in higher education desires to engage and take part in the global competitive economic growth and this somehow uneven impact of globalization on higher education and the national education systems has thus left an impression on all universities in Malaysia (Nair-Venugopal, 2006) to the point of knowledge changing into the status of commodity, the hallmark of the global neoliberal globalization (Campbell, 2012).

In this sense, Malaysian higher education reform and the difficulties and tensions that characterise it are, in fact, facing pressure to conform with the managerial and economically driven business practices, for instance in matters such as the culture of evaluative performance indicators, university rankings, and so on (Campbell, 2012). The doubt and anxiety surrounding this issue of renovation and globalization manifesting itself in Malaysian higher learning institiutions are seen as individualistic philosophies, and the goal pursued now is to turn Malaysia into a competitive nation (Goh, 2008). Currently, in the context of Malaysia, strains from the demands for performance regulation, competitive enhancements and the broad discourse of neoliberalism seem to be the forefront pursuit for institutions (Campbell, 2012) and this has made a huge impact on the current well-being and interests of academics in Malaysian universities.

This ideology of neoliberalism has thus far produced continuous ambiguity in regards to the employment status in academia, gave way to a model of unending struggle and competition, intensified the effort required to retain employment, caused a decline of in the supportive relations between institutions and workers, and created an environment of scrutinous evaluation and assessment (Berg et al., 2016) that has made academics wary and cautious of the future of higher education all together. Not only do these processes result to feelings of anxiety and uncertainty, it can also result in faculty members feeling constantly worried in the neoliberal university (e.g., Tytherleigh, Webb, Cooper, & Ricketts, 2005; Kinman, Jones, & Kinman, 2006).

**7.5.5 Chronosystem: Influences of the dimension of time**

Lastly,the timing of major events, decisions, and actions have a critical impact on the development of burnout among academics in their working career. Transcripts obtained from interviews noted academics reporting of the changes of their well-being and levels of burnout after a certain event or incident struck them, where their normal routine was changed into something different, and this also impacted their engagement towards work as well. One academic discussed her burnout and stress escalating due to the death of a beloved, citing that due to this key episode, her burnout escalated alongside the already heavy workload she had. Another academic shared his story of being admitted to hospital and diagnosed with a major health condition that impacted his engagement level and stretched on to him experiencing severe burnout due to this sudden episode. These academics mentioned that such incidents influenced their burnout levels, well-being, motivation, self-confidence, fitness, and daily attendance at work. One participant stated that, it was essential to continue focusing on personal health to stay fit and able for work, ‘As of now, I need to take care of myself. I can’t be sick. I can’t have high blood pressure. It’s not worth it’ (Female, M2 T1), another academic stated, ‘I think if you’re healthy and feel good about your body that will definitely affect your daily life’ (Female, L1 T1). Many academics conveyed that such abrupt events or incidents would, without doubt, break their normal routine if they were really unforeseen and this would place a hefty toil on their well-being and alter their work commitments.

Changes over time with regard to the nature of academic work shifting also contributes to the degree it prompts work-related strain and burnout. With the constant evolution of academia, the evolution of technology and the introduction of metrics, neoliberalism and other trends such as these have turned many aspects of academic life into a heavy liability for some. Many researchers have also speculated on how the current generation has changed in comparison to generations of university faculty in the past in having to deal with the more increasingly severe work settings, the stimulating and differing expectations have now become even more demanding than before (Acker & Armenti, 2004; Winefield et al., 2014; Ylijoki, 2013).

Other more major occurrences, such as Malaysia facing a financial crisis, were also significant influences on their burnout and stress levels, irrespective of being directly involved or otherwise. Lastly, participants also described in regards to even simple changes in timing, such as policy changes or deadlines, played a part in the progression of burnout and unrelenting engagement in their everyday career and resilience to perform.

**7.6 Summary and Conclusion**

To summarise, the findings reveal that academics identified significant influences and factors that had an impact on their burnout levels throughout their academic careers. Whilst highly aware of such influences toward their burnout levels and overall well-being academics astutely defined proactive coping strategies and mechanisms to promote sustained survival on the job. These predominantly involved specific strategies of having a persistent positive mind set towards burnout and stress, self-regulating behaviours, and knowing when to place limits and distance themselves from work demands and strain. These strategies were aided with gaining social support from colleagues and peers, and having a strong and reassuring work environment during the course of their career. Whilst academics were highly mindful of the struggles of balancing all these multiple connections, many Malaysian academics in this sample owed their endurance to their love for the academic profession and remained in this strenuous career due to this unending passion for the job.

Findings of this study also reveal that some academics that felt they were burned out from work and extremely fatigued each day. Nonetheless, however burned out these academics were they seemed to make it clear they still preserved a high level of empathy towards those they teach. It was quite interesting, as this was not the case for burned out educators in other past studies (Fisher, 2011; Jennings & Greenberg, 2009). Some academics in this sample experiencing high burnout did in fact understand the significance of resilience and engagement in their day to day dealings, which lessened the degrees of burnout and stress in the already competitive and demanding setting of academia as it improved their well-being in their career and improved their work performance as a result. With regard to which groups of academics fared better or worse in terms of burnout, those in the Survival or Discovery stages of the career were the ones suffering the most emotional exhaustion, and academics in the Advancement stage of the career reported suffering the least burnout.

In general, it emerged from the study that the academics in this study exhibited an improvement in their burnout standing from the commencement of the semester to the middle of the semester, while between the middle of the semester and the end of the semester the state was unchanging (static). These changes may perhaps be due to several factors such as having adjusted to the surrounding atmosphere or having learnt certain coping strategies, preventing them from further burn out and becoming emotionally insecure. Interestingly, from the interviews, there were academics who did not experience burnout and this assisted in contextualizing the experiences of those who did suffer throughout this whole episode. And, due to this, deeper insights were gained into the many issues facing those academics who were in a severe state of burnout and, having the advantage to hear the opposite side of the story, from those academics who did not suffer such a state and had a more carefree, relaxed, and untroubled career in academia.

A major outcome of this study was that academics were in fact conscious of the challenges and environmental factors in academia that capture the complexity of their everyday experiences of burnout and this was studied meticulously with themes that emerged during the narrative process providing a rich portrayal of academics’ views by means of Bronfenbrenner’s Ecological Model (1979). Many academics reported the need for support from the government, and that positive changes to aid and assist academics with their current workload, performance, aspirations, and the overbearing challenges placed on them be taken by the Ministry of Education. Results from this study may, thus, promote better awareness amongst academics themseleves, supervisors, university administrators, and others within the scope of higher education of the need to look into this issue of burnout that exists within the realm of academia in Malaysia.

**Chapter Eight: Conclusion and Recommendations**

**8.1 Introduction - Revisiting the Aims and Methods**

This research aims to examine the relationship between burnout, work engagement, and resilience among university academics in Malaysia, in addition to exploring the role of engagement and resilience in academics’ everyday careers as well as the benefits they play in lessening the degrees of burnout and stress in the already demanding setting of academia. It also investigated whether using personal resources (e.g. resilience, engagement) more effectively would or would not bring about a boost to their well-being and give added benefits to their overall institution. The intention was to determine if such factors have any influence on one another positively or negatively. Additionally, two categories of environmental factors, i.e. workload and feelings of Pressure to Publish, were also added into the framework to see if they would lead to the heightening of burnout or result in added disengagement towards work. The results emphasised the role of a high workload on the job and pressures to publish, which may or may not elicit psychological detachment from work, as suggested by Sonnentag and Kruel (2007). Key results attained showed burned out academics reported a lesser degree of engagement towards work and low resilience levels. Those who were burned out also exhibited an increased sense of Pressure to Publish and high levels of perceived workload. On the contrary, less burned out academics displayed higher resilience and reflected higher levels of engagement towards work. This study set out to gather information about the relationship between these variables together and to identify the association of such factors thereof.

The second goal of this study was to explore the intensities of burnout and engagement among Malaysian academics across their career stages in order to acheive a better insight of whether academics in different career stages would vary in displaying a certain pattern of burnout. For instance, are those lacking experience in academia or in the beginning years of their career in academia more prone and susceptible to breed burnout than those with more experience in the field? Otherwise, is it true that excessive workload and role stress places those lacking in experience (especially those in the Survival or Discovery stages of their career) in a more vulnerable position for burnout than those in the later (Establishment or Advancement) stages of their career?

This study furthermore aimed at identifying any changes to academics’ burnout across the one semester (14-week period) under study, specifically, to monitor for any variations in their reports of burnout or emotional exhaustion throughout the semester at the within-person level. This was intended to draw attention to the patterns of intra-individual changes in burnout over time and, more importantly, emphasise the fact that changes in burnout could be a result of changes in the academics’ perceptions of their institution, surroundings, and other factors such as individual, interpersonal, and systemic factors. In addition, this study looked into the factors Malaysian academics identified as instigating their levels of burnout in their careers.

This study brought together a two-stage mixed-methods design: (1) main numerical data were collected by means of surveys (quantitative) and (2) a longitudinal qualitative research method was used to collect in-depth semi-structured interview data (qualitative). The mixed methodology approach used here, with the assumption that the topic benefits from utilizing a multitude of approaches, was justified. In this research design, a collection of quantitative and qualitative data is seen as compatible and is thought to provide a more thorough and rich picture as compared to the use of only one data collection strategy alone. The participants were full time university academics from Malaysia, both males and females, working in public and private higher education institutions across Malaysia. The outcomes of the present study could be recommended as a way forward for university-based research in the future and may also serve as a guide for higher learning institutions and researchers alike on this particular issue.

**8.2 Summary of the Findings**

**8.2.1 Findings from the quantitative phase of the study**

For the initial data screening descriptive statistics and bivariate correlations were calculated. Other statistical methods employed in the study included hierarchical multiple regression, multivariate analysis of variance (MANOVA), and structural equation modelling. To test all four hypotheses simultaneously, SEM techniques were employed to test the fit of the research model.

A significant negative relationship with Emotional Exhaustion (burnout) was found for engagement (r = -0.17, p < 0.01). From these results, it was shown that academics reporting a lack of engagement in their work also reported being more emotionally exhausted in their career. These results supported the first hypothesis of this study, that burnout is negatively correlated with engagement.

Looking at the link between burnout and resilience, the two factors displayed a significant negative relationship (r = -0.20, p < 0.01). Academics displaying a low level of resilience showed a contrasting higher score in the Emotional Exhaustion dimension, signifying a counter direct relationship between the two variables. This demonstrates that academics’ burnout is influenced by their resilience levels and if burnout were to continue or prolong for a significant period, academics would be negatively affected and experience further vulnerability and fragility, instead of resilience which is regarded as a valuable resource to be acquired and conserved for survival (Hobfoll, Halbesleben, Neveu, & Westman, 2018). Although most of the academics surveyed appeared to have a moderate to high degree of resilience, the data indicated academics were still burned out, registering themselves in the “mild" and "medium" categorical groups. This serves to illustrate how academics perceived their levels of resilience; nonetheless, they are not absolutely apt at utilizing such resources in countering their burnout. Additionally, from the findings of this study, it is known that the impact of job demands (workload and Pressure to Publish) on burnout can be shielded by the presence of job resources (resilience and engagement). This mechanism would thus facilitate the adjustment of these academics to their challenging environment. However, if this fails to be achieved, evidence from research shows that further problems could develop and persist.

A significant and positive relationship was found for engagement and resilience (r = 0.41, p < 0.01), demonstrating that academics with high resilience also conveyed a high degree of engagement. As an academic’s resilience increased, so did their levels of engagement towards work. This factor points to the conservation of resources (COR) theory proposing that a set of resources enhances engagement and resilience within a workplace. Taken together, the findings suggest that promoting the use of resources (e.g. resilience) could lead to increased engagement toward work among academics. This may be fundamental to creating and sustaining engaged and resilient educators for universities. As Hobfoll et al. (2018) mention, people employ key resources not only to respond to strain but also to build a reservoir of sustaining resources for times of future need.

From the total sample of academics (n = 68), (High burnout = 22.17%, Medium = 20.85%, Low burnout = 56.98 %), this study found that academics in the ‘5 years or less’ experience group reported higher levels of burnout than those in the other more experienced groups. It was also evident that academics with less experience, practically always recorded higher levels of Pressure to Publish, greater levels of perceived workload, lacked in terms of engagement towards work, and displayed lower levels of resilience. Generally speaking, academics in this inaugural cluster are at the onset of their career, having placed high expectations on both themselves and the nature of the job, eagerly striving to succeed in all aspects of academia. Their emotions are at risk as a result of the heavy academic workload, unfulfilled beliefs, and more. Research (for example, Alfuqaha & Salem Alsharah, 2018; Fisher, 2011 and Louw, George, & Esterhuyse, 2011) also supports these findings as those with less experience on the job have been shown to be most associated with the highest levels of burnout in their samples of teachers. Perhaps demands are different for those early academics in their inaugural years of academia. For the most part, experienced academics could generally be less burdened with tedious administrative duties, such as committees and the like, and are given more quality time to focus on personal career boosts such as research, publications, and coaching those under them. It is interesting to note statistical analyses were conducted to find the burnout levels between novice and experienced academics were significantly different, with new academics having the higher levels of burnout. Novice academics, having just set foot in the career, are likely instilled with idealistic thoughts and prone to feel apprehensive to achieve and perform professionally (Friedman, 2000). If encountering failure at any aspects, they succumb to pressure and feel undervalued (Louw et al., 2011). From the MANOVA, results revealed a clear trend that experienced or seasoned academics lean towards showing a more engaged demeanour, reported being more resilient, and were less engrossed with feelings of Pressure to Publish. Seasoned academics (those in the ‘more than 35 years’ experience group) also stated the least burnout and the lowest perceived workload.

Looking at the final hypothesised model of resilience and burnout-engagement for this study, it was found that both factors of workload and Pressure to Publish were significant predictors of burnout. Paths between burnout, academics’ workloads, and Pressure to Publish were also in accordance with the expected directions, with workload being the largest determinant of burnout among academics (β = .46, p < .001), Pressure to Publish (β = .23, p <.001) came in second, and resilience, or the lack of it, having a lesser influence on burnout (β = -.02, p < .05).

For workload, academics with a higher level of perceived workload correspondingly reported a higher burnout level in support of Hypothesis 3. Many academics from the study blamed poor mental health on stress from the increased workloads they received. The majority of respondents who were ‘burned out’ stated having to continually struggle with the excessive workload would see them spend most of their time on particular tasks and not leave sufficient time to focus on other tasks. Interestingly, from the interviews, it is not those academic-related workloads that were positively related to emotional exhaustion, but rather non-academic-related workloads that heightened these academics’ burnout levels. Many respondents were fine with a heavy workload that enabled them to flourish in their academic career, but it was those tasks that did not have that much perceived relevance to this work which gave way to burnout. This finding confirms the role of the non-academic-related workload e.g. administrative duties being the most draining aspect of academic life and the amount of time required to focus on them escalating burnout levels among university academics. Furthermore, as expected, older academics reported less emotional exhaustion with the impact of the workload than younger academics. However, previous studies have contended that junior academics are mainly suffering a higher level of burnout due to greater teaching loads, in addition to having to conduct research (Ghorpade, Lackritz, & Singh, 2007; Kokkinos, 2007). This finding mirrored other past studies where a positive correlation between workload and burnout syndrome was found (Thakur, 2018; Yurur & Sarikaya, 2012).

The Malaysian academics studied also displayed the same pattern for the Pressure to Publish variable i.e. those reporting higher perceived feelings of Pressure to Publish stated greater feelings of burnout, thus giving confirmation to Hypothesis 2 in that there is a positive relationship between academics’ levels of burnout and perceived feelings of Pressure to Publish. What, exactly, causes publication pressure amongst university academics is quite imperative to reflect. Even though this study was not specifically designed to identify such causes, this study put forward that extreme publication pressure has harmful effects on the well-being of academics’, as shown in past studies (see Tijdink, Vergouwen, & Smulders, 2013). Many respondents in this study considered publication pressure as a burden, especially younger academics, and further felt being under constant pressure to perform. Moreover, this study shows as a result of this publication pressure, academics are at risk of developing a pessimistic view of their occupation and, for others, the thought of juggling successful research, teaching, administrative duties, grant bids, availability to students, and marking papers, was simply quite impossible to achieve.

Academics’ responses regarding this publication pressure somehow illustrate their confusion over what to prioritise in their career and how to appropriately balance their workload and constant incoming demands, resulting in suffering burnout in the career. Alternatively, this would perhaps indicate some failure on the university management’s part as well, due to failing to understand the condition that these academics face when it comes to the unbearable workload and publication expectations towards them.

Most of the individuals studied deliberated that, overall, academics are not adequately given the freedom or the autonomy to exercise their role as independent researchers, and are not being given the luxury to enjoy research and publishing without having to be bombarded with excessive pressure, again giving way to burnout. In sum, the majority of academics did believe that, in time, having learnt and growing used to being in this type of environment may lessen their degrees of burnout in the long run. Generally, all hypotheses proposed for this study were thus supported.

**8.2.2 Findings from the qualitative phase of the study**

Changes in burnout experienced by the academics were measured by carrying out interviews at 4–6 weeks from the start of the semester, the middle of the semester (week 9) and again at 12–14 weeks towards the end of the semester. The initial themes (i.e. at the start of the semester, T1) that emerged from Malaysian university academics’ interview transcripts comprised eight themes. T1 was aimed at enquiring academics’ experiences on the job in depth. Academics were asked to illustrate and narrate their academic career, their personal encounters with the burnout phenomenon (if any), the current university environment they work in, and so on. Themes which arose included: depiction of academics’ tell-tale signs of burnout, triggers of burnout among academics, coping mechanisms against burnout, thoughts of bringing work home, the love of being an academic, being resilient and surviving burnout and other challenges, the effect of burnout phases, and factors triggering stress.

Findings from T1 encapsulate the respondents’ perceptions of their professional roles as academics, their encounters with burnout and the various triggering factors that incite burnout levels during the start of the semester. Additionally, results from T1 illustrate how resilience aided academics in enduring difficult times by adjusting and adapting to the environment, and furthermore to substantiate the fact that those shielded with resilience were the ones who nearly always survived without bouts of burnout in the second, and through to final, time points. From what can be observed during T1, most academics were very passionate about their job (this included those belonging in the High burnout group) and many reported being burned out, not due to despising the nature of their career, being unwilling to take up extra workload, or being disengaged, but due to not having reliable resources or a fitting platform to support them performing better. Many discussed their willingness to commit to their institutions and career at all costs, if only support were sufficiently provided to them. These results clearly show that academics had no problem with professional enthusiasm when it came to their work or engagement with their duties as educators, but due to certain factors which deterred their fullest potential on the job (see ‘Triggers of burnout among academics’ section 5.3.2) resulting in them succumbing to burnout.

Themes that emerged from the second data collection stage, Time point 2 (in the middle of the semester) consisted of four themes: illustration of the more negative aspects of the career, getting away to cope with burnout, indication of an adaptation process among academics, and relentless attitude and continual grit. This second interview was aimed at understanding the changing nature of academics’ experiences from Time point 1, hence the themes of change and adjustments from the academics.

Results for T2 revealed that academics who previously presented evidence of burning out during Time point 1 (exhaustion, fatigue, etc. at the baseline), did not necessarily remain burned out during Time point 2. Likewise, participants who initially manifested being less burned out and less drained during T1 (those in the Low and Medium burnout cohorts) reported being burned out during this second interview phase, hence, there was a variation in the changes and trends of burnout. Academics who remained burned out from T1 up until T2 manifested the more negative aspects of their career, as reflected in the interview, where they repeatedly expressed their engagement and enthusiasm levels diminished in their daily work.

The difference in stability could be due to the current levels of burnout, engagement, and well-being being influenced by the surrounding environmental changes, where negative aspects of work such as job demands seemingly more strongly determined by external forces, than compared to other positive aspects. In the third wave (T3), interview transcripts comprised three themes: evidence of emotional trouble and exhaustion, and burnout levels not reducing, indication of an adaptation process among participants, and academics showing positive enthusiasm despite facing difficult times. The apparent trends found in the longitudinal data across the period of 14 weeks were the changes in academics’ experiences. Whereas some underwent gradual negative changes that eventually resulted in a chronic adverse experiential state of burnout, others became more positive over the course of the semester (where they began as ‘burned out’). These developmental changes, either negative or positive, may afford the opportunity to enhance better understanding of the progression into burnout states from a once positive state, or progression into a positive adaptation and resilience from a previous negative experiential state. Specifically, some academics reported enduring feelings of strain, exhaustion, devaluation towards work, and reduced accomplishment comparable to previous studies of this nature (Cresswell & Eklund, 2006).

Looking at the group level, T1 witnessed the highest reported rates of burnout among academics, which gradually decreased over the course of the 14-weeks. At 10 weeks (into the middle of the semester) burnout levels were observed to be diminishing and, at the final time point (T3), levels of burnout were constant. Between the data collection stages, these changes illustrate academics’ abilities in coping with burnout, and the clear indication of the presence of an adaptation process where participants portrayed an almost dismissive lack of concern about earlier worries and demands, now being substituted with a bland attitude towards on-the-job challenges and stress. A few of the respondents also pointed to the change in environmental settings becoming less strain inducing. Instances of adaptation against burnout are closely related to individual perceptions of the available situational and personal resources. Positive adaptations described by academics in this study encompassed problem focused coping, instilling ordinary events with positive meaning and positive reappraisal as identified in past research (see Folkman & Moskowitz, 2000). Overall, the developmental changes in burnout profiles obtained throughout the 14 week period offered a more precise and richer representation of the variations (changes or stabilty) in burnout levels of the 12 Malaysian academics sampled for this study.

**8.2.3 Summary of the key findings**

One of the significant outcomes to emerge from this thesis is the indication from the interview data pointing to Malaysian university academics defining their academic jobs as stressful. As not all academics in this sample were in a state of acute burnout they were nonetheless experiencing phases of burning out from time to time in their academic career and through this study voiced their sheer exhaustion and long kept frustration. Many educators are even oblivious of themselves being stricken with this burnout dilemma in the profession.

From this study, evidence suggests that burnout in academia can be attributed to the following factors, i.e. work strain, overbearing demands and expectations from University management, inadequate resources, intolerable workload demands, publication pressure within highly competitive settings, conflicts of interest, unrealistic beliefs or expectations from academics themselves, and a work-family life imbalance. Over the course of one semester, it was found that burnout at its peak (or at its trough) could progress into variations or fluctuate over time, demonstrating very high rises during peak competitive periods of the semester and much lower dips during the off-peak period.

Interviews also suggested that institutional factors or the university system are to blame for academics’ burnout episodes and, because of this, have resulted in them having to bear the pressure to perform in absence of the much needed institutional support and provisions entitled to them. Accordingly, academics have highlighted problems severely affecting their mental health and well-being, and many appeared to have survived working and operating in very harsh and conservative institutional settings. These were deficient of any sort of tolerance and open-mindedness, and academics were never given autonomy in the job where all matters are in constant assessment and scrutiny by means of impractical expectations and tools. This is what many of the academics revealed to be breeding their levels of burnout.

In addition, the study highlights, in detail, the existing scenario and predicaments of Malaysia’s higher education and higher learning institutes with matters such as the lack of resources, funding cuts, impossible workloads, and rising expectations, which are expected to become far more severe in the near future. Academics were especially displeased when it came to the inadequacy of resources that prevent them from catering to the levels of publishing and research expected of them by the University. Many also conveyed their disappointment at being pushed to conduct high quality research but not being provided ample provisions to do so. In addition, many were of the opinion that universities ought to assist academics in dealing with increasing workloads by providing the necessary support and adequate time for them to focus on particular tasks, eliminating any tasks that were irrelevant to the profession. Findings also showed the role individual-specific stressors have on academics’ burnout levels, whereby such stressors later bring about anxiety, demoralization, reduced workplace productivity, and intention to leave the profession.

Yet another interesting result from this study is that individuals who strive to be constantly orderly, in control, hardworking, and equipped with high ideals, were those most likely to fall victim to burnout. This clarifies that certain personality types, such as those with seemingly perfectionistic characteristics, set some individuals at a higher risk of suffering from emotional exhaustion (burnout), as portrayed by those in the sample and from past research as well (see Zhang, Gan, & Cham, 2007). Findings also illustrate how age renders its link with burnout as junior and inexperienced academics were more prone to experiencing burnout than those in the more established stages. Seasoned academics fare better as they are more able and more competent to handle the workload demands and are more skilled and proficient (Watts & Robertson, 2011).

Evidence also illustrates that burnout in Malaysian academics establishes the fusion of academic-specific stressors and institutional-specific stressors that leads to burning out and poses a potential threat to those in the higher education sector. It is vital to contemplate the increased demands thrust on these academics and the institutional strains they have to face as a result of the challenging nature of the present-day academia. Responses given by dissatisfied academics in this study have ranged from contemplating against an academic career, especially among junior educators wanting to leave their current university due to unreasonable strains and frustrations with management and bureaucracies to having to constantly build solid and resilient relationships with close colleagues, peers, and family members to ward off any negativity or symptoms of burnout in the workplace. They also adopt various strategies to support this, such as individual withdrawal within the system by actively protecting personal and independent space (e.g. refusing to engage beyond officially required minimums), and more.

The study findings have indicated academics were aware of early interventions and the types of coping mechanisms necessary for them to sustain and endure against a burnout episode. An extensive range of coping strategies and methods were reported by respondents, from getting the support of colleagues and being in a healthy and supportive work atmosphere, to having absolute independence in resisting and outliving all stressful circumstances by taking full control in their academic role. The majority of married academics stated their spouses were their main backing in battling stressful burnout occurrences. Others endured hard times by receiving care from other family members. Academics using exercise and sports to combat burnout were likewise reflected in the present study, indicating that exercise helps them alleviate stress and creates a sense of well-being. This was found in other research as well (Austin, Shah, & Muncer, 2005; Seidman & Zager, 1991). Whilst academics seemed to have adequate knowledge, skills, and familiarity when it came to the basic ways of protecting themselves from burnout, there were a few in the sample (the more vulnerable, constantly fatigued, irritable, and lacking resilience) who found it hard to avoid these burnout experiences.

Such abilities, skills, and resilience are critical as they aid in identifying, anticipating, and preparing one for a path of burnout avoidance (Niehoff, 1984), on top of sustaining a good level of engagement towards work. Whether an academic is deficient in any of these abilities, a basic knowledge of how to develop strategies for dealing with signs of burnout can enable them to endure better. In other words, this may identify the onset of burnout early, and enable academics to face fewer complications on the job and further affect their performance and demeanour.

Results gathered from the qualitative data validate and reflects what came out of the quantitative data in the first stage. This showed that the most resilient, robust, and resistant academics’ could get through difficult times by having a positive stance and the absolute ability to cope with all trials and demands of an academic career. The findings from the qualitative phase also gave us a clearer and more comprehensive view of how academics identified significant influences and factors that have an impact on their burnout levels, in addition to presenting the defined proactive coping strategies and mechanisms used when managing burnout. The qualitative interview data here thus complimented quantitative survey data in the analysis as it deepens the burnout meaning of the quantitative results as it could only display the extent to which these academics were burning out.

Comparing the findings of qualitative and quantitative research, it can be captured that although those who initially scored ‘high’ or were ‘burnt out’ in the survey data, after being interviewed not all of them remained in that state up until the end of data collection. Many preserved a high level of passion for their career and held on to many admiring work attributes, such as having very high empathy towards students, working to maintain competitiveness in the job, and preserving their personal engagement towards work (despite being in a burned out and fatigued state). This came as quite surprising, as it was not found to be the case for burned out educators in the past (Fisher, 2011; Jennings & Greenberg, 2009). Burned out academics in this study also understood the significant role of resilience and engagement in lessening the degrees of burnout and stress, as well as in improving their well-being in this demanding career.

**8.2.4 Conclusion**

Generally, findings from this study contribute to the existing literature in the burnout field, as it is one of a very few studies in Malaysia on university academics’ burnout and work engagement from an in-depth perspective of their actual experiences. The mixed method approach allowed for enhanced and deeper comprehension of the way academics confronted the burnout dilemma, the reasons they burnout, and the strategies and coping mechanisms they use to evade burnout.

Notably, at the beginning of the semester until the middle of the semester, levels of burnout improved for most academics, whilst from the middle of the semester towards the end levels of burnout were stationary (showing no significant changes). Patterns across the 14-week period of study uncovered an equal mixture of academics exhibiting positive or negative change, with regard to their burnout levels.

Many academics reporting a higher level of burnout appeared to comprehend the importance of resilience and engagement in their everyday career as it facilitated enhancing their overall well-being and work performance. Yet, there were a few academics who seemed oblivious to the significant role resilience can play in shielding themselves within the taxing environment they are in. Having this added ability distinguishes one from another in terms of faring and progressing better in difficult situations. This may be the distinct reason some academics appeared to endure and withstand well (remaining undamaged or unaffected) the demanding strains of academia. Thus, the current need is to focus on enabling these academics to become more resilient and more assured to better deal with cases of individual burnout in challenging situations.

**8.3 Limitations**

Readers of this study are encouraged to interpret the findings in light of thefollowing limitations. The author acknowledges that although the study findings bear witness to academics’ complex accounts of burnout, the sample tested was composed of only academics in Malaysia, nonetheless beyond the minimum requirement for the sample size as suggested by Krejcie and Morgan (1970) for a population of 50,000 potential respondents. However, caution must be exercised when attempting to generalise the present findings to other populations.

Secondly, the sample sizes of both Phase 1 (quantitative stage) and Phase 2 (qualitative stage) may have been too small, which could have influenced the study’s overall results. It would be useful if future studies replicate this work with a much larger sample, besides considering other noteworthy psychological variables such as job stress, affective commitment, etc. At the same, this study provided an insight into the burnout levels of academics in both private and public universities in Malaysia.

Thirdly, this longitudinal burnout study of Malaysia academics was conducted over the course of one semester (i.e. 14 weeks). Future research is highly encouraged, by replicating this study but extend it over three months, as if conducted through an expanded period (e.g. over a year), results may differ from those present here.

Fourthly, even though the views collected in the qualitative stage of this study were indeed in-depth, this study did not seek the viewpoints of the academics in regards to their burnout through means of a diary study. Having academics record entries about their daily burnout experiences and encounters in a diary, log, or journal, could offer very valuable, dissimilar, and insightful findings in addition to the survey research and interview narratives already presented in this study.

Finally, possible revisions of the questionnaire used in the quantitative stage during Phase 1 may also be warranted, with some items being added or remove and so on. It would be good to reduce items and ensure only reliable items are included in the questionnaire. Questions can also be worded as simply as possible to not sacrifice quality, to help in improving completion time. Future research ought to, therefore, attempt to replicate this study, to clarify whether such dimensions are related, or whether the present results are in any way attributable to limitations of the methodology.

**8.4 Recommendations**

The following recommendations are provided for mitigating burnout among university academics.

**8.4.1 Recommendations for academics**

We recommend academics always be on the lookout and alert to any possible burnout symptoms that may hinder them on the job. Having awareness of burnout is key as academics are now increasingly working in settings where resources are often restricted and the nature and structure of work is frequently changing (University of East Anglia, 2016, June 27). Having that awareness of the risks of burnout is an important prerequisite to mitigating its impact. To achieve this, they must be able to distinguish high, severe, and mild forms of burnout, differentiating between which demands highly overwhelm them, with burnout or strains that are weaker or milder in form. Practicing and prioritizing self-care is duly important.Academics are also recommended to continuously identify any possible conflicts in their career, or any issues that may heighten the onset of burnout, and to bring them to their respective departmental heads for further deliberation on ways to best resolve them. This could be somewhat challenging for those experiencing burnout due to a potentially strained relationship with administrators. Nevertheless, it is crucial for academics to try to advocate for themselves whenever experiencing burnout.

Another suggestion is for academics to continue developing their on-the-job management skills (e.g. prioritising key elements of workload), their levels of engagement towards work, resilience, and confidence levels, bearing in mind the importance to always exercise positivism, especially for younger academics. In developing on-the-job skills, academics could embrace other senior academics as a resource or reference point. These veteran academics may act as mentors and valuable advice, guidelines on how to become better educators, and so on can be sought. Attending professional development courses and training could also help in developing on-the-job skills. These may include workshops and courses on time management skills, mindfulness, building resilience, managing workload, and prioritisation, as well as others. Aside from that, restoring joy in everyday tasks and during time spent in the workplace is crucial to creating a more positive and conducive working atmosphere.

Characteristics of burnout were revealed particularly for younger faculty with junior academic ranks. In general, many academics are inadequately prepared for the onset of burnout, as there seemed to be no burnout awareness programmes and relevant courses existing in Malaysian universities. Greater awareness and enhanced professional development could help these educators develop early remediation programmes, with timely intervention.

**8.4.2 Recommendations for Malaysian universities**

Although findings like these provide valuable information about the very real emotional needs of university academics in Malaysia, they will only be of interest if the relevant education authorities take the necessary action, especially in introducing effective burnout intervention and prevention programmes. With such programmes available, higher levels of job satisfaction and work productivity can be achieved, in addition to increased engagement towards work.

However, the discussion of burnout avoidance cannot focus solely on academics per se, although academics bear personal responsibility to care for themselves organisations have an equally important role to play. Accordingly, it becomes very essential for universities to identify symptoms of burnout among faculty members due to its detrimental effects, not only on the academics themselves but also on the well-being of their students (Chen et al., 2014). Therefore, appropriate intervention strategies that emphasise the improvement of the academics’ skills in normalising stress factors that are encountered and recognising the key signs of burnout, its associated risks, and reflecting on the reasons they joined the profession in the first place ought to be developed and adopted as part of their professional development for the future. Stress Management Workshop held at one local university in Kuala Lumpur for staff members is one very good example that can be employed (International Islamic University Malaysia, 2011). The workshop covers topics such as the psychological pressure at work, occupational stress, depression and anger management, conflicts with co-workers, and crisis intervention. Upon completion of this workshop, participants were expected to be able to understand occupational stress and burnout, assess their current stress and burnout levels, build effective relationships on the job, adopt constructive approaches at the workplace, enhance organisational skills, and gain management skills for handling depression and anger. A revamp to the orientation program for newly recruited academics could also include a focus on resiliency, as it is equally important for these educators to fully learn and understand how to adequately take care of themselves and remain resilient in the changing scene of academia. Skills such as mindfulness and knowing why individual and organisational resilience is important will serve them well over the course of their career.

Additionally, a continual burnout related assessment could also be conducted from time to time to ensure they receive relevant levels of support from the university. This continuous burnout assessment can perhaps be run once every two or three months where individuals take time to sit down and complete burnout related inventories to monitor their levels. Such inventories could help faculty members discover personal stress levels and the warning signals of excessive burnout. Furthermore, with these continual burnout related assessment being carried out, university management are also able to foresee which individuals are at higher risk and can cater to them. The university has the obligation to encourage academics suffering from burnout to come forward about their situation. For those feeling burned out, the first step is to identify the symptoms of burnout. They can then evaluate the options available and discuss specific concerns with their head of department or supervisor. By discussing this with a superior, solutions can be made and certain goals can be set for what must be done and what can wait, etc. Seeking help, support, and advice from a trained professional treating work-related problems is another option. Such trained mental health professionals can offer valuable support and direction. For others, it may be sufficient to share the strain and pressure of the workplace with co-workers, friends, or loved ones. Access to an employee assistance program is also very helpful and academics should take advantage of relevant services to get rid of strains from the workplace. For extreme cases, a shift in the career is necessary if burnout levels are very severe. Nonetheless, a well-planned strategy for change is needed to go about making the change.

As of now, Malaysian universities have yet to offer education and training programmes for faculty members when it comes to handling burnout. Departments could initiate the development of an advanced training program to deal with exactly this problem, comprising ways to make these educators aware of the requirements needed as an academic. They can also cover challenges they may encounter and ways to detect and battle burnout. This could be very essential for those working in the field.

Universities need to understand why certain academics fare quite differently or are more prone to succumb to burnout than others by aptly responding, identifying, and implementing the most effective instructional approaches. Academics come in unique forms and sizes; organisations should avoid prescribing one-size fits all models when treating employee burnout. Instead, they must be constantly mindful of working with each unique academic to find flexible interventions and provide them adaptable and agile work settings. It also helps that universities offer these academics realistic workloads with the aid of strong administrative support. Demands for higher KPIs scores from these academics should be consistent with sufficient resource provision as well. Both realistic workloads and on-going emotional support are fundamental if employees are to manage stress and perform their jobs efficiently (University of East Anglia, 2016, June 27).

**8.4.3 Recommendations for policy-makers**

The present research findings have given rise to several key recommendations that can inform or influence policy in Malaysia suggesting that suitable policies for identifying burned-out faculty and setting up appropriate early intervention programmes should include some of the following.

The Ministry of Education may perhaps introduce standardised metrics to measure burnout amongst university faculty and make enhancements in terms of ways to monitor academics’ states of well-being in the profession. Whilst known and common metrics measuring job satisfaction and work engagement are used, metrics for burnout have been less popular in the Malaysian job context and less sought after than those for job satisfaction. Burnout scores of academics ought to be valued just as highly as job satisfaction, work engagement, and the like. Panels or regulatory boards to monitor academics and develop assessment tools based on these observations could also be devised as suitable and fitting to the Malaysian context. In general, policy-makers need to ensure the basic essentials of university academics are thoroughly met and criteria which are required to encourage and enhance academics’ working situations (such as overbearing workload and strain). Part of this would entail adequate provisions and proper resources to guarantee all that is required for teaching, research, and publications, etc. are not neglected.

**8.4.4 Recommendations for the government in terms of funding**

Financial support and government responsiveness can contribute significantly to the lessening of burnout amongst Malaysian university academics as, during the interviews, academics explained there were matters relating to the lack of financial support. They were apprehensive that the government was not adequately funding basic teaching necessities, appropriate training, or materials for research and publication, etc. What is therefore urgently required is that the Ministry of Education increases its budget allocation in channelling essential provisions such as training for staff, technology to support research, and basic teaching equipment and tools as a means for staff to execute their work more effectively and productively.

More funds ought to be apportioned to the various Malaysian universities to support the flourishing of high impact research and publications, and this could also ease the nation in marking its name in the world standards of higher education. Continued and ample funding as such would correspondingly assist and enable academics in their career growth and personal growth, as some have described that they had to be satisfied with only simple research due to a lack of resources.

**8.4.5 Recommendations for practice**

Many of the academics with burnout in this study had already acknowledged that they were in that state and had received some form of support; nevertheless, it becomes very crucial that these academics obtain the neccessary career guidance and be given suitable opportunity to conduct a comprehensive and meticulous individual assessments of themselves upon identifying any signs of burnout. They should also be made to feel valued in their work and be given enough space for their energy and keenness to be restored and their needs successfully met. University management has to play an important role in rendering support to these academics during such burnout stages to avoid further unnecessary mental health problems.

Lackritz (2004) mentions there are noteworthy implications for university administrators to engage and take interest in the mental well-being of their staff. With the vast accessibility of online or paper and pencil instruments measuring burnout, a periodic administration of these types of instruments would allow them to continuously monitor the burnout of university academics before it hits and spreads within a faculty. There also ought to be regular inspections and observations from university administrations of the factors that affect the productivity and effectiveness of academicians to take counteractive arrangements to develop education (Azeem & Nazir, 2008) and to avoid students being affected. Hence, educational institutions must continuously monitor these educators and take remedial actions in order to develop and enhance the quality of education in Malaysia as a whole.

In Malaysia, the Ministry of Education, has aspired towards the nation’s goal of achieving globalization in higher education. The Malaysian transformation plan and its aim to partake in the competitive international economic growth has side-lined the focal interests of these academics and, in the process, has aggravated their levels of burnout owing to the incessant assessments and performance indicators being heavily weighed to realise this very objective.

The current findings imply universities are lacking when it comes to programmes of such nature that deal with mindfulness, stress reduction, or retreats for academics, or workshops on how to manage stress and burnout. The focus now is that insufficient attention has been given to this dilemma, and many academics who are indeed enduring burnout appear to only endure with coping strategies that they themselves designed, as sooner or later it would take a toll on them and others in the long run if left untreated by university management.

Another major hindrance to academics’ well-being, which makes way for burnout, was the lack of basic necessities and resources provided by institutions both public and private as reported by the academics in the sample. There has also been a lack of emphasis on staff training by university management, resulting in the role conflict and ambiguity concerns taking place, particularly amongst younger faculty and junior lecturers.

This dissertation contends that it is the duty of university management to offer such guidelines, much-needed training, and to supply academics with unceasing job-related resources. By making such means available, academics may come to excel in their career, enhance their professional development, and lessening phases of burnout as a result of having their potential fulfilled, whilst also boosting their inner well-being and satisfaction. Workplaces ought to be infused with plentiful training improvement programmes, technology to promote teaching and research, suitable resources to increase motivation and build confidence, and other career growth related initiatives. If these were to be addressed fittingly the majority of university academics would avoid facing severe or acute burnout in their careers.

Aside from the above, having a connection or meaningful bond with Heads and superiors was expressed as a serving factor in combatting burnout, with those deficient in such relationships voicing concerns about the detrimental effects it had on their stress levels and emotional exhaustion. Superiors and heads of department play a big part in monitoring and supporting these academics, but were at times described as unsympathetic and withdrawn. Moreover, some displayed and showcased a demeanour of not empathising with academics’ predicaments. Others described them as precursors of strain and burnout. In short, such bosses failed to comprehend the significance of deliberating such burnout issues with their subordinates. Findings prove that supervisor-academic connectedness is essential for lessening degrees of burnout, as reported by respondents in this study.

**8.5 Future Research**

In view of the outcomes of this study, it is suggested that this research is replicated in the future. This is to improve the response rates for the first quantitative stage, which may increase the number of completed surveys. Owing to certain constraints, academics were sampled from just a few universities in Malaysia. To gain more understanding of this burnout problem in Malaysian universities it is highly recommended for replication throughout the country extending to all Malaysian universities, with the aim of giving a more comprehensive picture of the prevalence of the burnout issue surrounding the country. It is advised that future studies deliberate or ponder on the dissimilarities between burnt out academics and non-burnt out academics. Studies comparing and contrasting the two groups of individuals may bring about very insightful findings. More analysis is also desired to understand the nature and intricate relationships between the many factors or predictors of burnout by using a structural equation model. A thorough and comprehensive study, e.g. a large nationwide-scale survey, could then be conducted. Finally, replicated studies in the future could make use of other models to depicting the processes and factors leading to burnout among academics. As this study applied Bronfenbrenner’s Ecological Model (1979) as an organisational framework (due to it aligning well with burnout), other frameworks can be considered and used.

**Appendices**

# Appendix A: *Table for Determining Sample Size from a Given Population (Krejcie & Morgan, 1970)*

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *N* |  | *S* |  | *N* |  | *S* |  | *N* |  | *S* |
| 10 |  | 10 |  | 220 |  | 140 |  | 1200 |  | 291 |
| 15 |  | 14 |  | 230 |  | 144 |  | 1300 |  | 297 |
| 20 |  | 19 |  | 240 |  | 148 |  | 1400 |  | 302 |
| 25 |  | 24 |  | 250 |  | 152 |  | 1500 |  | 306 |
| 30 |  | 28 |  | 260 |  | 155 |  | 1600 |  | 310 |
| 35 |  | 32 |  | 270 |  | 159 |  | 1700 |  | 313 |
| 40 |  | 36 |  | 280 |  | 162 |  | 1800 |  | 317 |
| 45 |  | 40 |  | 290 |  | 165 |  | 1900 |  | 320 |
| 50 |  | 44 |  | 300 |  | 169 |  | 2000 |  | 322 |
| 55 |  | 48 |  | 320 |  | 175 |  | 2200 |  | 327 |
| 60 |  | 52 |  | 340 |  | 181 |  | 2400 |  | 331 |
| 65 |  | 56 |  | 360 |  | 186 |  | 2600 |  | 335 |
| 70 |  | 59 |  | 380 |  | 191 |  | 2800 |  | 338 |
| 75 |  | 63 |  | 400 |  | 196 |  | 3000 |  | 341 |
| 80 |  | 66 |  | 420 |  | 201 |  | 3500 |  | 346 |
| 85 |  | 70 |  | 440 |  | 205 |  | 4000 |  | 351 |
| 90 |  | 73 |  | 460 |  | 210 |  | 4500 |  | 354 |
| 95 |  | 76 |  | 480 |  | 214 |  | 5000 |  | 357 |
| 100 |  | 80 |  | 500 |  | 217 |  | 6000 |  | 361 |
| 110 |  | 86 |  | 550 |  | 226 |  | 7000 |  | 364 |
| 120 |  | 92 |  | 600 |  | 234 |  | 8000 |  | 367 |
| 130 |  | 97 |  | 650 |  | 242 |  | 9000 |  | 368 |
| 140 |  | 103 |  | 700 |  | 248 |  | 10000 |  | 370 |
| 150 |  | 108 |  | 750 |  | 254 |  | 15000 |  | 375 |
| 160 |  | 113 |  | 800 |  | 260 |  | 20000 |  | 377 |
| 170 |  | 118 |  | 850 |  | 265 |  | 30000 |  | 379 |
| 180 |  | 123 |  | 900 |  | 269 |  | 40000 |  | 380 |
| 190 |  | 127 |  | 950 |  | 274 |  | 50000 |  | 381 |
| 200 |  | 132 |  | 1000 |  | 278 |  | 75000 |  | 382 |
| 210 |  | 136 |  | 1100 |  | 285 |  | 1000000 |  | 384 |

Note.—*N* is population size. *S* is sample size.

# Appendix B: Questionnaire Form

**Engagement**

Below are statements about job-related feelings. Please read each statement carefully and decide if you ever feel this way about your job

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| **Never** | **Rarely** | **On Occasion** | **Sometimes** | **Often** | **Frequently** | **Always** |

|  |  |  |  |
| --- | --- | --- | --- |
|  | |  |  |
| 1. | While teaching I pay a lot of attention to my work. | | 0 1 2 3 4 5 6 |
| 2. | At work, I care about the problems of my colleagues. | | 0 1 2 3 4 5 6 |
| 3. | I find teaching fun. | | 0 1 2 3 4 5 6 |
| 4. | In class, I care about the problems of my students. | | 0 1 2 3 4 5 6 |
| 5. | While teaching, I work with intensity. | | 0 1 2 3 4 5 6 |
| 6. | In class, I am empathetic towards my students. | | 0 1 2 3 4 5 6 |

**Burnout**

The following statements describe the way you feel about working as an academic. Please use the scale to select the response that best applies to you.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| **Never** | **A few**  **times a**  **year or**  **less** | **Once a**  **month**  **or less** | **A few**  **times a**  **month** | **Once**  **a**  **week** | **A few**  **times a**  **week** | **Everyday** |

|  |  |  |
| --- | --- | --- |
|  |  |  |
| 1 | I feel emotionally drained from my work. | 0 1 2 3 4 5 6 |
| 2 | I feel used up at the end of the day. | 0 1 2 3 4 5 6 |
| 3 | I feel fatigued when I get up in the morning and have to face another day on the job. | 0 1 2 3 4 5 6 |
| 4. | Working with people all day is really a strain for me. | 0 1 2 3 4 5 6 |
| 5. | I feel burned out from my work. | 0 1 2 3 4 5 6 |
| 6. | I feel frustrated by my job. | 0 1 2 3 4 5 6 |
| 7. | I feel I am working too hard on my job | 0 1 2 3 4 5 6 |
| 8. | Working with people directly puts too much stress on me | 0 1 2 3 4 5 6 |

**Resilience**

Please read the following statements about your feelings and emotions at work, and select the response that best applies to you. Circle the number which best indicates your feelings about that statement. To the right of each you will find seven numbers, ranging from "1" (Strongly Disagree) on the left to "7" (Strongly Agree) on the right. Circle the number which best indicates your feelings about that statement. For example, if you strongly disagree with a statement, circle "1". If you are neutral, circle "4", and if you strongly agree, circle "7", etc.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 1 | 2 | 3 | 4 | | 5 | 6 | 7 |
| **Strongly**  **Disagree** | | | | **Strongly Agree** | | | |

|  |  |  |  |
| --- | --- | --- | --- |
|  | |  |  |
| 1. | I feel that I can handle many things at a time. | | 1 2 3 4 5 6 7 |
| 2. | I am determined. | | 1 2 3 4 5 6 7 |
| 3. | I can get through difficult times because I’ve experienced difficulty before. | | 1 2 3 4 5 6 7 |
| 4. | I have self-discipline. | | 1 2 3 4 5 6 7 |
| 5. | I keep interested in things. | | 1 2 3 4 5 6 7 |
| 6. | I can usually find something to laugh about. | | 1 2 3 4 5 6 7 |
| 7. | My belief in myself gets me through hard times. | | 1 2 3 4 5 6 7 |
| 8. | In an emergency, I’m someone people can generally rely on. | | 1 2 3 4 5 6 7 |
| 9. | My life has meaning. | | 1 2 3 4 5 6 7 |

**Workload**

The questions in this scale ask you about your feelings and thoughts about your current workload as an academic. Please use the following rating scale to indicate the extent to which you agree with the following statements.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 1 | 2 | 3 | 4 | 5 |
| **Strongly Disagree** | **Disagree** | **Hard to Decide** | **Agree** | **Strongly Agree** |

|  |  |  |
| --- | --- | --- |
|  |  |  |
| 1. | I do not have time to do the work that must be done. | 1 2 3 4 5 |
| 2. | I work intensely for prolonged periods of time. | 1 2 3 4 5 |
| 3. | I have so much work to do on the job that it takes me away from my personal interests. | 1 2 3 4 5 |
| 4. | I have enough time to do what’s important in my job. | 1 2 3 4 5 |
| 5. | I leave my work behind when I go home at the end of the workday. | 1 2 3 4 5 |

**Pressure to Publish**

In this scale, you will be asked to indicate the extent to which you agree with the following statements in regards to research.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 1 | 2 | 3 | 4 | 5 |
| **Strongly Disagree** | **Disagree** | **Neither Agree nor Disagree** | **Agree** | **Strongly Agree** |

|  |  |  |
| --- | --- | --- |
|  |  |  |
| I feel Pressure to Publish : | | |
| 1. | Articles in peer-reviewed journals. | 1 2 3 4 5 |
| 2. | Articles in editorially reviewed journals. | 1 2 3 4 5 |
| 3. | Scholarly books. | 1 2 3 4 5 |
| 4. | Textbooks. | 1 2 3 4 5 |
| 5. | Chapters in books. | 1 2 3 4 5 |
| 6. | Case studies. | 1 2 3 4 5 |
| 7. | From my department chair. | 1 2 3 4 5 |
| 8. | From my university’s central administration. | 1 2 3 4 5 |
| 9. | From colleagues at my university. | 1 2 3 4 5 |
| 10. | From colleagues at other universities. | 1 2 3 4 5 |
| 11. | From myself. | 1 2 3 4 5 |

Respondent background

Questions below are about your background. Please tick [√] in the appropriate box.

1. **What is your gender?**

Male **[ ]** Female  **[ ]**

1. **How old are you? \_\_\_\_\_\_\_\_\_**
2. **What is your ethnic group?**

Malay  **[ ]**

Chinese **[ ]**

Indian **[ ]**

Others **[ ]**

1. **How many years have you worked as an academic?** **\_\_\_\_\_\_\_** years
2. **In which institution do you belong to?**

Public University (Research) **[ ]**

Public University (Non-Research) **[ ]**

Private University **[ ]**

1. **Please indicate the academic post you currently hold.**

Professor **[ ]**

Associate Professor  **[ ]**

Assistant Professor **[ ]**

Senior Lecturer **[ ]**

Lecturer **[ ]**

Tutor **[ ]**

Other **[ ]**

1. **What is your current status?**

Single, never married **[ ]**

Married without children **[ ]**

Married with children **[ ]**

Divorced **[ ]**

Widowed **[ ]**

Other **[ ]**

**Appendix C: Burnout Interview Guide**

1. **Warm-up questions (before start of interview)**
2. Tell me about your personal history and experience in regards to becoming and being an academic.
3. Please briefly sketch the details of your career/a brief summary or overview of your academic career?
4. How did you get involved?
5. **“Critical incidents” questions**
6. Describe a particular situation(s) or event(s) representative of your experiences of occupational burnout?
7. Briefly outline the circumstances and context involving burnout?
8. What happened to you, and how does this explain your response to burnout?
9. **Core questions**

Burnout

1. What does the term burnout mean to you? How do you understand it?
2. Personally, how are you feeling right now? Are you feeling burned out?
3. Can you share some examples of emotionally exhausting/day-to-day experiences of burnout that you face as an academic at this university?
4. How did you handle them? How were you able to reset yourself from the stressful event? Any lessons learned from these experiences?
5. How do personal or workplace demands affect your burnout levels?
6. How do you lessen and/or manage feelings of burnout?
7. Describe how burnout has influenced the way you view your work as a university academic?
8. What are your main sources of support? Who do you always talk to? Do you have social support at work or home that contribute to your overcoming burnout?
9. What have you noticed about other individuals who seem to be successful in their adaptation to burnout in this career?

Resilience

1. How would you define resiliency? What is your greatest resilient strength as an academic?
2. What is the key to bouncing back from the stressful events? Do past experiences impact your current ability to bounce back? How?
3. What would you suggest that others do to become resilient? Why do you think resiliency may be essential to the academic profession?
4. How do you deal with day to day challenges of your work? During a stressful time describe an incident when you exhibited purposeful actions to overcome the challenges in order to get the job done.

Engagement

1. How important is engagement in your work? Describe.
2. Describe how burnout has influenced your levels of work engagement? Since you have been working here, is there anything that you feel particularly proud of?
3. What are the elements you think are important to be at a state of constant engagement in your career? Explain.
4. What is it about you that helps you get or stay engaged as an academic? Can you give me an example?

Career Stages

1. In which of the (early, middle, or late) career stages do you think is more receptive to burnout. Describe.
2. As an (early/middle/late) career stage academic, what needs or strategies (resiliency skills) are required to battle burnout? Explain.
3. **Questions to investigate change over time**

(\*to be used in subsequent interviews i.e. Time point 2 and 3)

1. Do you think there are any differences (increase/decrease/changes) in the levels of burnout you experienced since the last interview?
2. If yes, what do you consider has contributed to the above? Explain.
3. How about in regards to your levels of engagement towards work/resilience? If there were changes, what factors do you think contributed to this? Describe.
4. Of the three components (burnout/engagement/resilience), what has remain constant or consistent throughout your experience? Explain.

**Appendix D: Information Letter and Consent Form**



Title of Study: Examining Burnout, Engagement, and Resilience in Malaysian University Academics

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**Introduction**

Hello, my name is Fairuz Rusdi and I am a Ph.D. student at the Department of Education, University of York. As part of my doctoral studies, I am conducting a research on burnout and resilience in university academics. You are being invited to take part in this research study, of which purpose is to improve our understanding of the perceived levels of burnout among academics. This form explains the research purpose, procedures, what will happen to the data and so on. The information will help you to decide whether you wish to be part of the study or otherwise.

**Purpose**

The aim of this research project is to

* Determine the relationship between burnout, engagement and resilience of Malaysian university academics
* Investigate the stable and changing components of burnout across time.

**Procedures of Questionnaires and Interviews**

By taking part in this research study, you are consenting to complete a questionnaire with a possibility of a follow up individual interview, both of which will include broad questions about your perceived levels of burnout, engagement, and resilience. If you agree to participate in an interview, it will be arranged at a mutually convenient time and place.

Interviews will last approximately 40-50 minutes and will be conducted at three-time points (T1, T2, and T3). Your name will not be disclosed in any reports of this research and will not be associated with your responses in any way that will enable anyone to identify you or your institution. By signing this informed consent, you are agreeing to your survey data and extracts of your interview responses being used anonymously in research i.e. conferences, presentations or online. For participants who agree on being interviewed, an incentive will be given. All interviews will be audio recorded and you may ask to see the written version of your interview data. Identifying information will be removed from the interview data after the final interview.

**Who is being invited to participate?**

You are invited to participate in this study because you are currently an academic working at either a public or private Malaysian university. You are however under no obligation whatsoever to participate in this study.

**Benefits**

There are no direct benefits for participants. Nevertheless, through your participation; it is hoped that researchers will learn more about burnout, engagement, and resilience in a university setting.

**What does participating mean?**

If you chose to participate in this study, you will be asked to complete an on-line survey. Questions will be asked regarding your general demographics, stage of career, workload, perceived levels of burnout, engagement, and resilience. The survey will take approximately 15-20 minutes to complete. A follow-up individual interview will only be conducted with those selected and have prior given their approval.

**Participation and Withdrawal**

Participation in this research is voluntary; you may decline to participate without any penalty. If you choose to participate, you may withdraw participation at any time. As a willing, voluntary participant in this research, you are entitled to decline to answer any question, without repercussion. You can withdraw any part of interview data from the project at any point prior to identifying information being removed (i.e. up until seven days after the final interview data has been collected) by contacting the principal investigator, Fairuz Rusdi (details below).

**Confidentiality**

Every effort will be made to ensure your data is confidential. The results of both the survey and interviews may be shared for research or training purposes but no individuals or institutions will be identifiable in any way. Survey data will be presented in aggregate form (i.e. reporting only combined results and never reporting individual ones) and interview data will be reported without any identifying information (i.e. pseudonyms will be used to protect participants’ identity). The data will be kept for 10 years after which time it will be destroyed.

**What are the potential risks of this research?**

There are no foreseeable risks linked with this study; however, you may feel uneasy upon answering questions around workload, engagement, and burnout as it relates to your current situation.

**What will be done with my information?**

Survey data will be collected using the on-line survey tool provided by Qualtrics and will be stored in the Qualtrics-secure database until data collection is complete. When the survey has closed and data collection has been completed, the data will be downloaded (stripped of identifying information) and removed from the Qualtrics server. For interviews, the recording and subsequent transcript will be stored in password-protected files on secure University of York servers and encrypted disks during the life of the project. Only the primary investigator and supervising professor as named above will have access to the data you provide. Data will be kept anonymously after completion of the project for further analysis if necessary up to 10 years after the project completion.

**How can I find out more about this study?**

If you have any questions regarding your rights as a research participant or any questions you would like to ask before giving consent, please do not hesitate to contact either of the following people:

Principal researcher: Fairuz A. Rusdi Email: [far512@york.ac.uk](mailto:far512@york.ac.uk)

Chair of Ethics Committee Email: [education-research administrator@york.ac.uk](mailto:education-research%20administrator@york.ac.uk)

This study has been reviewed and received ethics clearance through the Department of Education Ethics Committee at The University of York.

**Digital Signature of Agreement**

Please express your consent to take part in this research by ticking the appropriate column for each item in the table below, then signing and dating the form.

|  |  |  |
| --- | --- | --- |
|  | Yes 🗹 | No 🗹 |
| Having read the information above, I agree to take part in this project. |  |  |
| I fully understand that my participation is voluntary and that I can withdraw at any time. |  |  |
| I have been given the opportunity to ask questions. |  |  |
| I agree to participate in a follow-up individual interview if being selected. |  |  |
| I agree to extracts of my interview responses and survey data being used anonymously in research i.e. conferences, presentations or online. |  |  |

**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Appendix E: Example of Interview Transcription**

Interviewer (researcher): I

Academic interviewee: R

**Date/ time:** January 12, 2017/ 94 minutes (Time Point 1, T1)

**Place of interviewing:** Staff meeting room at the interviewee’s institution

**Academic (interviewee):** H1, 41 years, female, Malay academic, Senior Lecturer, with more than 12 years in academia, Science discipline, Institution type: Public University, Married. Willing to participate, smiley face. When she talks seems to be full with emotions and expressions (pleased, excited, frustrated, etc.)

***Starting interview by interviewer introduced herself, the purpose of research, ethical issue, etc.***

***Q and A.***

I: Personally how do you feel about that? I mean you want to do more but there’s no resources?

R: There’s limitations. But at the same time there’s the top management asking us to publish, publish, do research. I think it’s very ironic and very unfair. “You are setting up high KPI (Key Performance Indicators) for the lecturers but you don’t provide the necessary resources and you do not even send them out for any training or whatsoever! Not only at this faculty, I also asked my friends at the Faculty of Business, they also told me the same story that they have to spend their own budget for training too.

**I: Okay, so there’s no allocation at all…?**

R: No, and there’s a restriction in the human resource department - they cannot send staff for training. Well, restriction of human resources is not my problem! It should be someone else’s problem and someone needs to settle it. If they want us to fulfil our KPI then do it as necessary. I am very frustrated nowadays with our SKT (Annual Performance Target) and with our LNPT (Annual Performance Evaluation Report) because at the end of the year we have to fill in all the evidence.

**I: Is it twice a year?**

R: No, once a year and I tell you, some of my friends and even I cannot achieve 80% or above 80%. If you want to get confirmed or you want to get promoted, you must have 85% above. But with all these restrictions, I don’t even think we can achieve that. In certain circumstances, I also heard if let’s say the boss favour you he will increase you marks!

I: I see…

R: Even though it’s in the papers and written documents…and of course in the written documents you have to fill in but at the end of the day, sometimes those who receives the “Anugerah Perkhidmatan Cemerlang” (Excellent Service Award), they’re not based on the Annual Performance Target. And even though the LNPT is not 85%, they can still receive the award. So it’s unfair here and there and it accumulates the frustration.

I: Is that one source of you being burned out here in this institution?

R: Yes. Hmm, I feel frustrated because I have to achieve the KPI, if let’s say there is no high KPI required and we need to just focus on the teaching and learning I might just be able to still tolerate with the situation but we also have to do research and we also have to publish papers. The best part about this is, last year, I’ve already submitted two papers to journals and it’s still under review and I cannot put that submitted papers in my LNPT as a published paper.

I: Why not?

R: Because it’s not publish yet and I just lost marks there… and in that document there is nothing stated there that if you have papers that have been submitted under review. No clause about that. I consumed a lot time in preparing those two manuscripts to publish and doing research to get the data. They’ve never considered that!

# References

Abouserie, R. (1996). Stress, coping and job satisfaction in university academic staff. *Educational Psychology, 16*, 49-56.

Acker, S., & Armenti, C. (2004). Sleepless in academia. *Gender and Education, 16,* 3–24. doi: 10.1080/0954025032000170309

Adekola, B. (2010). Gender differences in the experience of work burnout among university staff. *African Journal of Business Management, 4*(6), 886-889.

Ahsan, N., Abdullah, Z., Fie, D. Y. G., & Alan, S. S. (2009). A study of job stress and job satisfaction among university staff in Malaysia: Empirical study. *European Journal of Social Sciences, 8,* 120-131.

Akgemci, T., Demirsel, M. T., & Kara, O. (2013). The effect of psychological resilience on employees’ burnout level. *Academic Journal of Interdisciplinary Studies, 2*(11), 122– 128.

Alfuqaha, O., & Salem Alsharah, H. (2018). Burnout among nurses and teachers in Jordan: A comparative study. *Archives of Psychiatry and Psychotherapy, 2*, 55-65. doi: 10.12740/APP/80168

Al-Hudawi, S. H. V., Fong, R. L. S., Musah, M. B., & Tahir, L. M. (2014). The actualization of the Malaysian national education philosophy in secondary schools: Student and teacher perspectives. *International Education Studies, 7*(4), 57-68. http://dx.doi.org/10.5539/ies.v7n4p57

Alacacioglu, A., Yavuzsen, T., Dirioz, M., Oztop, I., & Yilmaz, U. (2009). Burnout in nurses and physicians working at an oncology department. *Psycho-Oncology,* *18*(5), 543-548.

Aldwin, C. M. (1991). Does age affect the stress and coping process? Implications of age differences in perceived control. *Journal of Gerontology, 46*, 174-180.

Allinder, R. M. (1994). The relationship between efficacy and the instructional practices of special education teachers and consultants. *Teacher Education and Special Education, 17*, 86-95.

American Psychological Association. (2011*). The road to resilience*. Retrieved from http://www.apa.org/helpcenter/road-resilience.aspx

Anitei, M., Chraif, M., & Ionita, E. (2015). Gender differences in workload and self-perceived burnout in a multinational company from Bucharest. *Procedia - Social and Behavioral Sciences, 187*, 733-737.

Arnett, J. J. (2004). *Emerging adulthood: The winding road from the late teens through the twenties*. New York, NY: Oxford University Press Inc.

Arnett, J. J. (2008). The neglected 95%: Why American psychology needs to become less American. *American Psychologist, 63,* 602–614.

Aryee, S., Luk, V., Leung, A., & Lo, S. (1999). Role stressors, inter-role conflict, and well- being: The moderating influence of spousal support and coping behaviors among employed parents in Hong Kong. *Journal of Vocational Behavior, 54*, 259-278.

Asensio-Martinez, A., Leiter, M. P., Gascon, S., Gumuchian, S., Masluk, B., Herrera- Mercadala, P., Albesaa, A., & García-Campayoa, J. (2017). Value congruence, control, sense of community and demands as determinants of burnout syndrome among hospitality workers. *The International Journal of Occupational Safety and Ergonomics.* doi: 10.1080/10803548.2017.1367558

Ashworth, P. (2003). *The origins of qualitative psychology*. In J.A. Smith (Ed.), Qualitative Psychology: A practical guide to research methods (pp. 4‐24). London: Sage.

Asimeng-Boahene, L. (2003). Understanding and preventing burnout among social studies teachers in Africa. *Social Studies, 94*(2), 58-62.

Austin, V., Shah, S., & Muncer, S. (2005). Teacher stress and coping strategies used to reduce stress. *Occupational Therapy International, 12*(2), 63–80.

Azalea, A., & Lin, M-H. (Eds.). (2015, June 5-6). Job satisfaction and turnover intention of Malaysian lecturers: Public vs private. *ASEAN 2015: Challenges and Opportunities*. Paper presented at 7th International Conference on Humanities and Social Sciences, Faculty of Liberal Arts, Prince of Songkla University (362-373).

Azeem, S. M., & Nazir, N. A. (2008). A study of job burnout among university teachers. *Psychology Developing Societies, 20*(1), 51-64.

Aziz, H. (2018, June 7). UM breaks into Top 100 in World University Rankings. New Straits Times. Retrieved from https://www.nst.com.my/

Bagozzi, R.P., & Yi, Y. (1988). On the evaluation of structural equation models. *Journal of the Academy of Marketing Science, 16*, 74-94.

Bakker, A. B., & Bal, P. M. (2010). Weekly work engagement and performance: A study among starting teachers. *Journal of Organizational Psychology, 83*, 189-206.

Bakker, A. B., & Demerouti, E. (2007). The job demands–resources model: State of the art. *Journal of Managerial Psychology, 22*, 309–328.

Bakker, A. B., & Demerouti, E. (2008). Towards a model of work engagement. *Career Development International, 13*(3), 209–223.

Bakker, A. B., Demerouti, & Sanz-Vergel (2014). Burnout and work engagement: The JD–R approach. *Annual Review of Organizational Psychology and Organizational Behavior, 1*, 389-411.

Bakker, A. B., Demerouti, E., & Verbeke, W. (2004). Using the Job Demands-Resources model to predict burnout and performance. Human Resource Management, 43, 83- 104.

Bakker, A. B., Hakanen, J. J., Demerouti, E. & Xanthopoulou, D. (2007). Job resources boost work engagement, particularly when job demands are high. *Journal of Educational Psychology, 99*, 274-284.

Bakker, A. B., Rodriguez-Munoz, A., & Derks, D. (2012). The emergence of positive occupational health psychology. *Psicothema, 24*(1), 66-72.

Bakker, A. B., & Schaufeli, W. B. (2008). Positive organizational behavior: Engaged employees in flourishing organizations. *Journal of Organizational Behavior, 29,* 147– 154.

Bakker, A. B., Schaufeli, W. B., Leiter, M. P., & Taris, T. W. (2008). Work engagement: An emerging concept in occupational health psychology. *Work & Stress, 22*, 187–200.

Bakker, A. B., Schaufeli, W. B., Sixma, H. J., Bosveld, W., & van Dierendonck, D. (2000). Patient demands, lack of reciprocity, and burnout: A five-year longitudinal study among general practitioners. *Journal of Organizational Behavior, 21*, 425-441.

Bakker, A. B., Van Emmerik, H., & Van Riet, P. (2008). How job demands, resources, and burnout predict objective performance: A constructive replication. *Anxiety, Stress, & Coping, 21*(3), 309-324.

Bal, E., Grassiani, E., & Kirk, K. (2014). Neoliberal individualism in Dutch universities: Teaching and learning anthropology in an insecure environment. *Learning and Teaching, 7*(3), 46–72.

Baltes, P. B. (1987). Theoretical propositions of life-span developmental psychology: On the dynamics between growth and decline. *Developmental Psychology, 23*(5), 611-626.

Baltes, P. B., & Smith, J. (2004). Life span psychology: From developmental contextualism to developmental biocultural Co-constructivism. *Research in Human Development, 1*(3), 123–143.

Baltes, P. B., Lindenberger, U., & Staudinger, U. M. (1998). *Life-span theory in developmental psychology*. In R. M. Lerner (Ed.), W. Damon (Series Ed.), Handbook of child psychology: Vol. 1. Theoretical models of human development. New York: Wiley.

Baltes, P. B., Staudinger, U. M., & Lindenberger, U. (1999). Life span psychology: Theory and application to intellectual functioning [Review]. *Annual Review of Psychology, 50*, 471–507

Bandura, A. (1977). *Social learning theory*. Englewood Cliffs, NJ: Prentice Hall.

Bandura, A. (2001). Social cognitive theory: An agentic perspective. *Annual Review of Psychology, 52*, 1-26.

Barkhuizen, N., Rothmann, S., & van de Vijver, F. J. R. (2014). Burnout and work engagement of academics in higher education institutions: Effects of dispositional optimism. *Stress and Health, 30*, 322–332.

Barnes, C. (2003). What a difference a decade makes: Reflections on doing ‘emancipatory’ disability research. *Disability & Society, 18*(1), 3-17.

Baron, R. M. & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology, 51*(6), 1173-1182.

Bauer-Wu, S., & Fontaine, D. (2015). Prioritizing clinician : The University of Virginia’s Compassionate Care Initiative. *Global Advances in Health and Medicine, 4*(5), 16-22.

Beer, D. (2016). *Metric Power*. London: Palgrave Macmillan.

Beltman, S., Mansfield, C., & Price, A. (2011). Thriving not just surviving: A review of research on teacher resilience. *Educational Research Review, 6*(3), 185-207.

Berg, L. D., Huijbens, E. H., & Larsen, H. G. (2016). Producing anxiety in the neoliberal university. *The Canadian Geographer*, 60(2), 168-180.

Bernard, R. (2017, April 15). *Marriage, children cause more burnout for female physicians*. Medical Economics Website. Retrieved from

http://medicaleconomics.modernmedicine.com/medical-economics/news/marriage- children-cause-more-burnout-female-physicians

Bland, J. M., & Altman, D. G. (1997). Statistics notes: Cronbach’s alpha. *British Medical Journal, 314,* 572.

Blix, A. G., Cruise, R. J., Mitchell, B. M., & Blix, G. G. (2006). Occupational stress among university teachers. *Educational Research, 36*(2), 157-169. doi: 10.1080/0013188940360205.

Bollen & J. S. Long (Eds.). *Testing structural equation models* (pp. 136-162). Beverly

Hills, CA: Sage.

Bonanno, G. A., Moskowitz, J. T., Papa, A. & Folkman, S. (2005). Resilience to loss in bereaved spouses, bereaved parents, and bereaved gay men. *Journal of Personality and Social Psychology, 88*(5), 827-843.

Borg, M. G. & Falzon, J. M. (1990). Coping actions by Maltese primary school teachers. *Educational Research, 32*, 50–58.

Brandtstadter, J., & Renner, G. (1990). Tenacious goal pursuit and flexible goal adjustment: Explication and age-related analysis of assimilative and accommodative strategies of coping. *Psychology and Aging, 5*, 58-67.

Britt, T. W., Adler, A. B., & Bartone, P. T. (2001). Deriving benefits from stressful events: The role of engagement in meaningful work and hardiness. *Journal of Occupational Health Psychology, 6*, 53-63.

Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design.* Cambridge, MA: Harvard University Press.

Brouwers, A., & Tomic, W. (2000). A longitudinal study of teacher burnout and perceived self-efficacy in classroom management. *Teaching and Teacher Education, 16*, 239– 253.

Brown, W. (2015). *Undoing the Demos: Neoliberalism’s Stealth Revolution*. Cambridge, MA: MIT Press.

Browne, J. (2010). *Securing a Sustainable Future for Higher Education: An Independent Review of Higher Education Funding and Student Finance*, 12 Oct. 2010. London: BIS. Available at: http://www.educationengland.org.uk/documents/pdfs/2010-browne- report.pdf (Accessed: 20/05/18).

Browne, M. W., & Cudeck, R. (1993). *Alternative ways of assessing model fit.* In: K. A.

Brunetti, G. J. (2006). Resilience under fire: perspectives on the work of experienced, inner city high school teachers in the United States. *Teaching and Teacher Education, 22*, 812–825.

Brunsting, N. C., Sreckovic, M. A., & Lane, K. L. (2014). Special education teacher burnout: A synthesis of research from 1979 to 2013. *Education and Treatment of Children*, *37,* 681–711.

Burke, R. (1989). Career stages, satisfaction, and well-being among police officers. *Psychological Reports, 65*, 3-12.

Byrne, B. M. (1991). Burnout: Investigating the impact of background variables for elementary, intermediate, secondary and university educators. *Teaching and Teacher Education, 7*, 197– 209.

Byrne, B. M. (1994). *Structural equation modeling with EQS and EQS/Windows*. Thousand Oaks, CA: Sage Publications.

Byrne, B. M. (2012). *Structural equation modeling with Mplus: Basic concepts, applications, and programming*. New York, NY: Taylor and Francis Group.

Calman, L., Brunton, L., & Molassiotis, A. (2013). Developing longitudinal qualitative designs: lessons learned and recommendations for health services research. *BMC Medical Research Methodology, 13,* 14. http://doi.org/10.1186/1471-2288-13-14

Campbell, J. (2012). Higher education reform values and the dilemmas of change: Challenging secular neoliberalism. In H. Cuadra-Montiel, (Ed.), *Globalization- Education and management agendas*. doi: 10.5772/3256

Cano-Garcia, F. J., Padilla-Munoz, E. M., & Carrasco-Ortiz, M. A. (2005). Personality and Contextual variables in teacher burnout. *Personality and Individual Differences, 38*, 929-940.

Carpenter, S. (2000). Effects of cultural tightness and collectivism on selfconcept and causal attributions. *Cross-Cultural Research, 34*, 38–56.

Chen, W. S., Haniff, J., Siau, C. S., Seet, W., Loh, S. F., & Abd, M. H. (2014). Burnout in academics: An empirical study in private universities in Malaysia. *The International Journal of Social Sciences and Humanities Invention, 1*(2), 62–72.

Cherniss, C. (1992). Consequences of burnout: An exploratory study. *Journal of Organizational Behavior, 13*(1), 1-11.

Chibucos, T. R., Leite, R. W., & Weis, D. L. (2004). *Life-span developmental theory.* Retrieved from

http://uk.sagepub.com/sites/default/files/upm-binaries/4992\_Chibucos\_Chapter\_3.pdf

Chirkowska-Smolak, T., & Kleka, P. (2011). The Maslach Burnout Inventory–General Survey: validation across different occupational groups in Poland. *Polish Psychological Bulletin, 42*(2), 86-94.

Cidlinska, K. (2015). Whom and why the Czech academic science loses in the pursuit of excellence and competitiveness? Gender aspects of dropouts from academic science. *Rings the international research association of institutions of advanced gender studies*. Paper presented at RINGS small conference and General Assembly 2015, Prague, Czech Republic Abstract retrieved from http://ringsgender.org/sites/ringsgender.org/files/abstracts\_rings\_2015\_revisited\_final.pdf

Coakes, S. J. (2005). *SPSS: Analysis without anguish: Version 12.0 for Windows*. John Wiley & Son Australia, Ltd.

Cockburn, A. D. (1996) Primary teachers’ knowledge and acquisition of stress relieving strategies. *British Journal of Educational Psychology, 66*, 399–410.

Coetzee, M., & De Villiers, M. (2010). Sources of job stress, work engagement and career orientations of employees in a South African financial institution. *South African Business Review, 14*(1), 27–58.

Cohen, M., Kahn, D. L., & Steeves, R. H. (2000*). Hermeneutic phenomenological research: A practical guide for nurse researchers*. Thousand Oaks, CA: Sage.

Cordes, C. L., & T. W. Dougherty. (1993). A review and integration of research on job burnout. *Academy of Management Review, 18*, 621– 656.

Court, S., & Kinman, G. (2008, December). *Tackling Stress in Higher Education, University and College Union*. Retrieved 8 August 2015 from http://www.ucu.org.uk/media/pdf/8/a/ucu\_hestress\_dec08.pdf

Cousins, J. B., & Walker, C.A. (2000). Predictors of educators’ valuing of systematic inquiry in schools. *Canadian Journal of Program Evaluation, Special Issue*, 25-53.

Cranley, N. M., Cunningham, C. J. L., & Panda, M. (2016). Understanding time use, stress and recovery practices among early career physicians: An exploratory study*. Psychology, Health & Medicine, 21*(3), 362-367.

Creswell, J. W. (1998). *Qualitative inquiry and research design: Choosing among five traditions*. Thousand Oaks: Sage.

Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches*. Thousand Oaks, CA: Sage.

Cresswell, S. L., & Eklund, R. C. (2006). The nature of athlete burnout: Key characteristics and attributions. *Journal of Applied Sport Psychology, 18,* 219-239.

Creswell, J. W., & Plano Clark, V. L. (2011). *Designing and conducting mixed methods research* (2nd ed.). Thousand Oaks, CA: Sage.

Cronbach, L. (1951). Coefficient alpha and the internal structure of tests. Psychomerika, 16, 297-334.

Cross, D. I., & Hong, J. Y. (2012). An ecological examination of teachers’ emotions in the school context. *Teaching and Teacher Education, 28*(7), 957–967.

Cruickshank, J. (2016). Putting Business at the Heart of Higher Education: On Neoliberal Interventionism and Audit Culture in UK Universities. *Open Library of Humanities, 2*(1): e3, pp. 1–33, doi: http://dx.doi.org/10.16995/olh.77

Cummings, T., & Worley, C. (2001). Organization development and change (7th ed.). Cincinnati, OH: Southwestern College

Dale, J., & Weinberg, R. (1990). Burnout in sport: A review and critique. *Journal of Applied Sport Psychology, 2*, 67-83.

Daniels, D., & Strauss, E. (2010). Mostly I’m driven to tears, and feeling totally unappreciated: Exploring the emotional wellness of high school teachers. *Procedia - Social and Behavioral Sciences, 9*, 1385–1393. https://doi.org/10.1016/j.sbspro.2010.12.339

Day, C. (2000). *The life and work of teachers: International perspectives in changing times*. London: Falmer

Day, C., & Gu, Q. (2010). *The new lives of teachers*. New York: Routledge.

Day, C., Sammons, P., Stobart, G., Kington, A., & Gu, Q. (2007). *Teachers matter: Connecting work, lives and effectiveness.* Maidenhead: Open University Press.

Demerouti, E., Bakker, A. B., & Bulters, A. J. (2004). The loss spiral of work pressure, work– home interference and exhaustion: Reciprocal relations in a three-wave study. *Journal of Vocational Behavior, 64*, 131–149.

Demerouti, E., Bakker, A. B., De Jonge, J., Janssen, P. P. M., & Schaufeli, W. B. (2001). Burnout and engagement at work as a function of demands and control. *Scandinavian Journal of Work, Environment and Health, 27*, 279–286.

Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The job demands resources model of burnout. *Journal of Applied Psychology, 86*, 499 –512.

Demerouti, E., Peeters, M. C. W., & Van der Heijden, B. I. J. M. (2012). Work–family interface from a life and career stage perspective: The role of demands and resources. *International Journal of Psychology, 47*, 241–258.

Denton, D. A, Newton, J. T., & Bower, E. J. (2008). Occupational burnout and work engagement: A national survey of dentists in the United Kingdom. *British Dental Journal, 205*, 382–383

Denzin, N. K., & Lincoln, Y. S. (Eds.). (2000). *Handbook of qualitative research* (2nd ed.). Thousand Oaks, CA: Sage.

DeVellis, R. F. (2012). *Scale development: Theory and applications*. (3rd ed.). Thousand Oaks, CA: Sage.

DiCicco-Bloom, B., & Crabtree, B. F. (2006). The qualitative research interview. *Medical Education, 40*(4), 314-321.

Dick, M. J. (1992). Burnout in doctorally prepared nurse faculty. *Journal of Nursing Education 31*, 341–346.

Dicke, T., Marsh, H. W., Parker, P. D., Kunter, M., Schmeck, A., & Leutner, D. (2014). Self- efficacy in classroom management, classroom disturbances, and emotional exhaustion: A moderated mediation analysis of teacher candidates. *Journal of Educational Psychology, 106*(2), 569-583.

Djordjevic, A. (2010). *Factors mediating the effect of age on early career burnout*. Retrieved from: https://pingpong.ki.se

Dorman, J. P. (2003). Relationship between school and classroom environment and teacher burnout: A LISREL analysis. *Social Psychology of Education, 6*, 107–127.

Doyle, C., & Hind, P. (1998). Occupational stress, burnout and job status in female academics. *Gender, Work and Organisation, 5*, 67–82.

Drewery, K., Riley, A., & Staff, H. (2008). *Gen up – How the four generations work.* Retrieved February 15, 2014, from <http://www.cipd.co.uk/NR/rdonlyres/25DA52DE-> F120-4579-AFE3-564C8801425D/0/genuphowfourgenerationswork.pdf

Duchscher, J. E. B. (2009). Transition shock: the initial stage of role adaptation for newly graduated registered nurses. *Journal of Advanced Nursing, 65*, 1103-1113.

Duckworth, A. L. Steen, T. A. & Seligman, M. E. P (2005). Positive psychology in clinical practice. *Annual Review of Clinical Psychology, 1*, 629–651

Dunford, B. B., Shipp, A. J., Wayne Boss, R., Angermeier, I., & Boss, A. D. (2012). Is burnout static or dynamic? A career transition perspective of employee burnout trajectories. *Journal of Applied Psychology, 97*(3), 637-650.

Dunn, S. (2003). *Burnout: An ounce of prevention is worth a pound of cure*. Retrieved from

http://www.managerwise.com/article.phtml?id=409

Dyrbye, L. N., Power, D. V., Massie, F. S., Eacker, A., Harper, W., Thomas, M. R., Szydlo, D. W., Sloan, J. A., & Shanafelt, T. D. (2010). Factors associated with resilience to and recovery from burnout: A prospective, multi-institutional study of US medical students. *Medical Education, 44*, 1016-1026.

Dyrbye, L. N., Shanafelt, T. D., Balch, C., Satele, D., Freischlag, J. (2011). Relationship between work home conflicts and burnout among American surgeons: A comparison by sex. *Archives of Surgery, 146*, 211-217.

Dyrbye, L. N., Varkey, P., Boone, S. L., Satele, D. V., Sloan, J. A, Shanafelt, T. D. (2013). Physician satisfaction and burnout at different career stages. *Mayo Clinic Proceedings, 88*(12), 1358-1367.

Dyrbye, L. N., West, C. P., Satele, D., Boone, S., Tan, L., Sloan, J. & Shanafelt, T. D. (2014). Burnout among US medical students, residents, and early career physicians relative to the general US population. *Academic Medicine, 89*(3), 443-451.

Ee, J., & Chang, A. (2010). How resilient are our graduate trainee teachers in Singapore? *The*

*Asia-Pacific Education Researcher, 19*(2), 321-331.

Edward, K. L. (2005). The phenomenon of resilience in crisis care mental health clinicians. *International Journal of Mental Health Nursing, 14*, 142–148.

Edwards, J., Van Laar, D. L., & Easton, S. (2009). The Work-Related Quality of Life (WRQoL) scale for higher education employees. *Quality in Higher Education. 15*(3), 207-219

Eker, M., & Anbar, A. (2008). Work related factors that affect burnout among accounting and finance academicians. *The Journal of Industrial Relations and Human Resources, 10*(4), 110-137.

El-Ibiary, S. Y., Yam, L., & Lee, K. C. (2017). Assessment of burnout and associated risk factors among pharmacy practice faculty in the United States. *American Journal of Pharmaceutical Education*, *81*(4), 75. doi:10.5688/ajpe81475

Etzion, D. (1988). The experience of burnout and work/non-work success in male and female engineers: A matched-pairs comparison. *Human Resource Management, 27*(2), 163– 179.

Etzion, D., & Pines, A. M. (1986). Sex and culture in burnout and coping among human service professionals. *Journal of Cross-Cultural Psychology, 17*, 191-209.

European Agency for Safety and Health at Work (2003). *Gender Issues in Safety and Health at Work*; Office for Official Publications of the European Communities: Luxembourg, Luxembourg.

Everly, G. S., McCormick, D. K., & Strouse, D. A. (2012). Seven characteristics of highly resilient people: Insights from Navy SEALs to the greatest generation. *International Journal of Emergency Mental Health, 14*(2), 17-143.

Evers, W. J., Gerrichhauzan, J., & Tomic, W. (2000). *The prevention and mending of burnout among secondary school teachers*. Technical Report. Retrieved August 22, 2015 from EBSCOHOST database on the World Wide Web: http://www.ebsco.com

Evers, W. J., Tomic, W., & Brouwers, A. (2004). Burnout among teachers: Students’ and teachers’ perceptions compared. *School Psychology International, 25*, 131-148.

Farber, B. A. (1998). Tailoring treatment strategies for different types of burnout. Paper presented at the Annual Convention of the American Psychological Association. (ERIC Document Reproduction Service NO. ED424 517)

Feldman, Z., & Sandoval, M. (2018). Metric power and the academic self: Neoliberalism, knowledge and resistance in the British university. *tripleC*, *16*(1), 214-233.

Fergus, S., & Zimmerman, M. A. (2005). Adolescent resilience: A framework for understanding healthy development in the face of risk. *Annual Review of Public Health, 26*, 399-419.

Ferguson-Patrick, K. (2010). Cooperative learning and quality teaching: early career teachers striving for quality. *International Journal of Learning, 16*(12), 385-400.

Fisher, M. H. (2011). *Factors Influencing Stress, Burnout, and Retention of Secondary Teachers*. Current Issues in Education, 14(1). Retrieved from http://cie.asu.edu/

Folkman, S., Moskowitz, J. T. (2000). Positive affect and the other side of coping. *American Psychologist, 55*, 647–654.

Friedman, I. A. (1995). Student behavior patterns contributing to teacher burnout. *Journal of*

*Educational Research, 88*, 281–289.

Friedman, I. A. (2000). Burnout in teachers: Shattered dreams of impeccable professional performance. *Journal of Clinical Psychology, 56*(5), 595–606.

Fredrickson, B. L. (2001). The role of positive emotions in positive psychology: The Broaden-and-Build Theory of positive emotions. *The American Psychologist, 56*, 218– 226.

Freeney, Y. M., & Tiernan, J. (2009). Exploration of the facilitators of and barriers to work engagement in nursing. *International Journal of Nursing Studies, 12*, 1557–1565.

Gandi, J., C., Wai, P., S., Karick, H., and Dagona, Z., K. (2011). The role of stress and level of burnout in job performance among nurses. *Mental Health Family in Medicine, 8*(3), 181–194.

Garcia, G. M., & Calvo, J. C. A. (2012). Emotional exhaustion of nursing staff: Influence of emotional annoyance and resilience. *International Nursing Review, 59*, 101–107.

Garcia-Izquierdo, M., Rios-Risquez, M. A., Carrillo-Garcia, C., & Sabuco-Tebar, E. D. A. (2015). The moderating role of resilience in the relationship between academic burnout and the perception of psychological health in nursing students. *Educational Psychology: An International Journal of Experimental Educational Psychology, 35*(5), 1 -13.

Garmezy, N. (1991). Resiliency and vulnerability to adverse developmental outcomes associated with poverty. *American Behavioral Scientist, 34*(4), 416–430.

Gates, G. S. (2000). Teaching-related stress: The emotional management of faculty. *The Review of Higher Education, 23*(4), 469-490.

Gentile, B., Grabe, S., Dolan-Pascoe, B., Twenge, J. M., Wells, B. E., Maitino, A. (2009). Gender differences in domain specific self-esteem: A meta-analysis. *Review of General Psychology, 13*, 34–45.

Ghorpade, J., Lackritz, J., & Singh, G. (2007). Burnout and personality: Evidence from academia. *Journal of Career Assessment, 15*(2), 240-256.

Glass, A. (2007). Understanding generational differences for competitive success. *Industrial and Commercial Training, 39*(2), 98–103.

Goode, W. J. (1960). A theory of role strain. *American Sociological Review, 25*, 483-496.

Goodson, I. F., & Sikes, P. J. (2001). *Life history research in educational settings: Learning from lives*. Buckingham: Open University.

Gonzalez-Roma, V., Schaufeli, W. B., Bakker, A. B. & Lloret, S. (2006). Burnout and engagement: Independent factors or opposite poles? *Journal of Vocational Behavior, 68*, 165-174.

Gibson, S., & Dembo, M. (1984). Teacher efficacy: A construct validation. *Journal of Educational Psychology, 76*(4), 569-582.

Gill, R., & Donaghue, N. (2016). Resilience, apps and reluctant individualism: Technologies of self in the neoliberal academy. *Women’s Studies International Forum 54*, 91–99.

Gillespie, N. A., Walsh, M., Winefield, A. H., Dua, J., & Stough, C. (2001). Occupational stress in universities: Staff perceptions of the causes, consequences and moderators of stress. *Work & Stress, 15*, 53-72

Gito, M., Ihara, H., & Ogata, H. (2013). The relationship of resilience, hardiness, depression

and burnout among Japanese psychiatric hospital nurses. *Journal of Nursing Education and Practice, 3*(11), 12-18.

Gmelch, W. H., Lovrich, N. P., & Wilke, P. K. (1984). Sources of stress in academe: A national perspective. *Research in Higher Education, 20*, 477-490.

Gmelch, W. H., Wilke, P. K., & Lovrich, N. P. (1986). Dimensions of stress among university faculty: Factor-analytic results from a national study. *Research in Higher Education, 24*, 266–286.

Goh, B. L. (2008). Globalization and postcolonial nation in Malaysia: Theoretical challenger and historical possibilities. *Kasarinlan: Philippine Journal of Third World Studies, 23*(2), 4-19.

Grant, L. & Kinman, G. (2013). ‘Bouncing back?’ Personal representations of resilience of student and experienced social workers. *Practice, 25*(5), 349-366. doi: 10.1080/09503153.2013.860092

Grapragasem, S., Krishnan, A., & Mansor, A. N. (2014). Current Trends in Malaysian Higher Education and the Effect on Education Policy and Practice: An Overview. *International Journal of Higher Education, 3*(1), 85-93.

Grayson, J. L., & Alvarez, H. K. (2007). School climate factors relating to teacher burnout: A mediator model. *Teaching and Teacher Education, 23*, 1349–1363.

Greene, M. J. (2014). On the inside looking in: Methodological insights and challenges in conducting qualitative insider research. *The Qualitative Report, 19*(15), 1–13.

Griffin, M., Hogan, N., & Lambert, E. (2014). Career stage theory and turnover intent among correctional officers. *Criminal Justice and Behavior, 41*, 4–19.

Groenewald, T. (2004). A phenomenological research design illustrated. *International Journal of Qualitative Methods, 3*(1), 1–26.

Grund, A., Brassler, N., & Fries, S. (2016). The long arm of work: A motivational conflict perspective on teacher strain. *Teaching and Teacher Education, 60*, 153-163.

http://dx.doi.org/10.1016/j.tate.2016.08.013

Guglielmi, R., & Tatrow, K. (1998). Occupational stress, burnout and health in teachers: A methodological and theoretical analysis. *Review of Educational Research, 68*(1), 61- 99.

Gunkel, M., Lusk, E., Wolf, B., & Li, F. (2007). Gender specific effects at work: An empirical study of four countries. *Gender, Work and Organization, 14*, 56–79.

Guskey, T. R. (1988). Teacher efficacy, self-concept, and attitudes toward the implementation of instructional innovation. *Teaching and Teacher Education 4*(1), 63-69.

Gustafsson, G., Norberg, A., & Strandberg, G. (2008). Meanings of becoming and being burnout – phenomenological hermeneutic interpretation of female healthcare personnel’s narratives. *Scandinavian Journal of Caring Sciences, 22*, 520–528.

Gustavsson, J. P., Hallsten, L., & Rudman, A. (2010). Early career burnout among nurses: Modelling a hypothesized process using an item response approach. *International Journal of Nursing Studies, 47*, 864-875.

Hair, J. F. (1998). *Multivariate Data Analysis*, Fifth Edition, Prentice-Hall International, Inc.

Hair, J. F., Anderson, R. E., Tatham, R. L., & Black, W. C. (1998). *Multivariate data analysis.* Prentice Hall International, Upper Saddle River, New Jersey.

Hakanen, J. J., Bakker, A. B., & Schaufeli, W. B. (2006). Burnout and work engagement among teachers. *Journal of School Psychology, 43*, 495–513.

Hakanen, J. J., Schaufeli, W. B., & Ahola, K. (2008). The Job Demands-Resources model: A three-year cross-lagged study of burnout, depression, commitment, and work engagement. *Work & Stress, 22*, 224–241.

Hallberg, U. E., & Schaufeli, W. B. (2006). “Same same” but different? Can work engagement be discriminated from job involvement and organizational commitment? *European Psychologist, 11*, 119–127.

Hamdan, M., & Hamra, A. A. (2017). Burnout among workers in emergency Departments in Palestinian hospitals: prevalence and associated factors. *BMC Health Services Research, 17*, 407. http://doi.org/10.1186/s12913-017-2356-3

Hamzah, S. R., Hamzah, A., Othman, J., & Devi, S. (2016). Impact of Islamic values on the leadership style of Muslim women academics in Malaysia. *Advances in Developing Human Resources, 18*(2), 187–203.

Hartney, E. (2008). *Stress management for teachers*. [Electronic resource]. London: Continuum International.

Hertzog, M. A. (2008). Considerations in determining sample size for pilot studies. *Research in Nursing & Health, 31*, 180-191.

Hirschman, C. (2016). Gender, the status of women, and family structure in Malaysia. *Malaysian Journal of Economic Studies, 53*(1), 33-50.

Hoare, C. (2015). Resilience in the elderly. *The Journal of Aging Life Care* (Fall issue) Retrieved from

http://www.aginglifecarejournal.org/resilience-in-the-elderly/

Hobfoll, S., Halbesleben, J., Neveu, J. P., & Westman, M. (2018). Conservation of resources in the organizational context: The reality of resources and their consequences. Annual Review of Organizational Psychology and Organizational Behavior, 5, 103–128. https://doi.org/10.1146/annurev‐orgpsych‐032117‐104640

Hofstede, G. (2012). *The Hofstede Centre: What about Malaysia?* Retrieved from

https://geert-hofstede.com/malaysia.html

Howard, S., & Johnson, B. (2004). Resilient teachers: Resisting stress and burnout. *Social Psychology of Education, 7*(4), 399-420.

Heine, S. J., & Norenzayan, A. (2006). Toward a psychological science for a cultural species. *Perspectives on Psychological Science, 1*(3), 251–269.

Henny, J., Anita, A. R., Hayati, K. S., & Rampal, L. (2014). Prevalence of burnout and its associated factors among faculty academicians. *Malaysian Journal of Medicine and Health Sciences, 10*(1), 51-59.

Hofstede, G. (2001). *Culture’s consequences: Comparing values, behaviors, institutions, and organizations across nations*. Thousand Oaks, CA: Sage Publication.

Hofstede, G. (2011). Dimensionalizing cultures: The Hofstede model in context. *Online Readings in Psychology and Culture, 2*(1). Retrieved from dx.doi.org/10.9707/2307- 0919.1014.

Hofstede, G. (2012). *The Hofstede Centre: What about Malaysia?* Retrieved from

https://geert-hofstede.com/malaysia.html

Hoole, C., & Bonnema, J. (2015). Work engagement and meaningful work across generational cohorts. *SA Journal of Human Resource Management, 13*(1), 1-11. doi: 10.4102/sajhrm.v13i1.681

Hoppe, M. H. (2004). An interview with Geert Hofstede. *Academy of Management Executive, 18*, 75–79.

Howard, S., & Johnson, B. (2004). Resilient teachers: resisting stress and burnout. *Social Psychology of Education, 7*, 399–420.

Higgins, E. T. (1996). The “self digest”: Self-knowledge serving self-regulatory functions. *Journal of Personality and Social Psychology, 71*, 1062–1083.

Hill, A. P., & Appleton, P. A. (2012). Perfectionism and athlete burnout in junior elite athletes: The mediating role of motivation regulations. *Journal of Clinical Sport Psychology, 6*(2), 129-146.

Hind, R. R., Dornbusch, S. M., & Scott, W. R. (1974). A theory of evaluation applied to a university faculty. *Sociology of Education, 47*, 114–128.

Hsu, M. K., Chen, H. G., Jiang, J. J., & Klein, G. (2003). Career satisfaction for managerial and technical anchored IS personnel in later career stages. *SIGMIS Database, 34*(4), 64–72.

Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling, 6*, 1-55.

Huberman, M. (1989). The professional life cycle of teachers. *Teachers College Record, 91*(1), 31-57.

Hultell, D., Melin, B., & Gustavsson, J. P. (2013). Getting personal with teacher burnout: A longitudinal study on the development of burnout using a person-based approach. *Teaching and Teacher Education, 32*, 75–86. doi:10.1016/j.tate.2013.01.007

Hyvonen, K., Feldt, T., Salmela-Aro, K., Kinnunen, U., & Makikangas, A. (2009). Young managers’ drive to thrive: A personal work goal approach to burnout and work engagement. *Journal of Vocational Behaviour, 75*(2), 183– 196.

Idris, M. K. (2009). *Occupational stress in academic life: A study of academics of Malaysian public universities.* (Unpublished doctoral thesis). The University of Waikato, New Zealand. Retrieved from

http://researchcommons.waikato.ac.nz/handle/10289/2597

Index Mundi (2016, October 8). *Malaysia demographics profile 2016*. Retrieved from:

http://www.indexmundi.com/malaysia/demographics\_profile.html

Innanen, H., Tolvanen, A., & Salmela-Aro, K., (2014). Burnout, work engagement and workaholism among highly educated employees: Profiles, antecedents and outcomes. *Burnout Research, 1*(1), 38–49.

International Islamic University Malaysia. (2011). Stress management workshop – IIUM

Retrieved from

www2.iium.edu.my/cerdas/events/stress-management-workshop

Iwata, N., Roberts, C. R., & Kawakami, N. (1995). Japan-U.S. comparison of responses to depression scale items among adult workers. *Psychiatry Research, 58*, 237-245.

Jackson, R. A. (1993). An analysis of burnout among school of pharmacy faculty. *American*

*Journal of Pharmaceutical education, 57*(1), 9–17.

Jackson, R. A., Barnett, C. W., Stajich, G. V., & Murphy, J. E. (1993). An analysis of burnout among school of pharmacy faculty. *American Journal of Pharmaceutical Education,*

*57*, 9-17.

Jackson, S. E., Turner, J. A., & Brief, A. P. (1987). Correlates of burnout among public service lawyers. *Journal of Occupational Behavior, 8*, 339-349.

Jamal, M. (1999). Job stress and employee well-being: A cross-cultural empirical study. *Stress Medicine, 15*, 153-158.

Jennings, P. A., & Greenberg, M.T. (2009). The prosocial classroom: teacher social and emotional competence in relation to student and classroom outcomes. *Review of Educational Research, 79*(1), 491e525. Retrieved from http://dx.doi.org/10.3102/0034654308325693.

Jensen, P. M., Trollope-Kumar, K., Waters, H., & Everson, J. (2008). Building physician resilience. *Canadian Family Physician, 54*(5), 722–729.

Johnston, D., & Lee, W.-S. (2012). Climbing the job ladder: New evidence of gender inequity. *Industrial Relations: A Journal of Economy and Society 51*(1), 129–151.

Kahn, W. A. (1990). Psychological conditions of personal engagement and disengagement at work. *Academy of Management Journal, 33*, 692–724.

Kahn, W. A. (1992). To be fully there: Psychological presence at work. *Human Relations, 45,* 321–349.

Karabiyik, L., Eker, M., & Anbar, A. (2008). Determining the factors that affect burnout among academicians. *Ankara Universitesi SBF Dergisi, 63*(2), 91-115.

Karriker, J. H., & Williams, M. L. (2009) Organizational justice and organizational citizenship behavior: A mediated multifoci model. *J. Management, 35*(1), 112-135.

Kaufmann, M. (2001). Physician burnout: Part I cause and condition. *Ontario Medical Review, 11*, 48-49.

Kelly, S., & Northrop, L. (2015). Early career outcomes for the ‘best and the brightest’: Selectivity, satisfaction, and attrition in the beginning teacher longitudinal survey. *American Educational Research Journal, 52*(4), 624-656.

Kenny, D. A. (2015, November 24*). Measuring model fit*. Retrieved from

http://davidakenny.net/cm/fit.htm

Kenny, D. A. (2016, September 28). *Mediation*. Retrieved from: http://davidakenny.net/cm/mediate.htm

Khamisa, N., Peltzer, K., Ilic, D., & Oldenburg, B. (2017). Effect of personal and work stress on burnout, job satisfaction and general health of hospital nurses in South Africa. *Health SA Gesondheid, 22*, 252–258.

Kim, H., Ji, J., & Kao, D. (2011). Burnout and physical health among social workers: A three-year longitudinal study. *Social Work, 6*, 258-268. 10.1093/sw/56.3.258.

Kinman, G. (2001). Pressure points: A review of research on stressors and strains in UK academics. *Educational Psychology, 21*, 473–492.

Kinman, G., Jones, F., & Kinman, R. (2006). The Well‐being of the UK Academy, 1998– 2004. *Quality in Higher Education, 12*(1), 15–27.

Kinman, G., & Wray, S. (2013). *Higher stress: A survey of stress and well-being among staff in higher education*. Retrieved from

http://www.ucu.org.uk/media/pdf/4/5/HE\_stress\_report\_July\_2013.pdf

Klassen, R. M., Yerdelen, S., & Durksen, T. L. (2013). Measuring teacher engagement: Development of the engaged teachers scale (ETS). *Frontline Learning Research, 2*, 33–52.

Kline, R. B (2011). *Principles and practice of structural equation modeling*. New York: Guilford Press.

Klusmann, U., Kunter, M., Trautwein, U., Ludtke, O., & Baumert, J. (2008a). Engagement and emotional exhaustion in teachers: Does the school context make a difference? *Applied Psychology: An International Review, 57*, 127–151.

Klusmann, U., Kunter, M., Trautwein, U., Ludtke, O., & Baumert, J. (2008b). Teachers’ occupational well-being and quality of instruction: The important role of self- regulatory patterns. *Journal of Educational Psychology, 100*(3), 702–715.

Kokkinos, C. M. (2007). Job stress, personality, and burnout in primary school teachers. *British Journal of Educational Psychology, 77*(1), 222-43.

Kirkpatrick, C. L. (2007, April). *To invest, coast or idle: Second-stage teachers enact their job engagement*. Paper presented at the annual conference of the American Educational Research Association, Chicago, IL. Retrieved from http://isites.harvard.edu/fs/docs/icb.topic1240460.files/CLK%20aera%202007%20paper%20to%20post.pdf

Kitayama, S., Markus, H. R., Matsumoto, H., Norasakkunkit, V. (1997) Individual and collective processes in the construction of the self: Self-enhancement in the United States and self-criticism in Japan. *Journal of Personality and Social Psychology, 72*, 1245-1267.

Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement, 30*, 607-610.

Kucukoglu, H. (2014). Ways to cope with teacher burnout factors in ELT classrooms. *Procedia Social and Behavorial Sciences, 116*, 2741-2746.

Kunze, A. (2014). “The Family Gap in Career Progression.” IZA Discussion Paper No. 8478.

Kwiek, M. (2017). A generational divide in the academic profession: A mixed quantitative and qualitative approach to the Polish case. *European Educational Research Journal 16*, 1–25.

Kyriacou, C. (2001). Teacher stress: Directions for future research. *Educational Review, 53*(1), 27-35.

Kyriacou, C., & Sutcliffe, J. (1978). Teacher stress: prevalence, sources, and symptoms. *British Journal of Educational Psychology, 48*, 2, 323-365.

Lackritz, J. R. (2004). Exploring burnout among university faculty: Incidence, performance, and demographic issues. *Teaching and Teacher Education, 20*, 713–729.

Lai, C., & Wiggins, M. S. (2003). Burnout perceptions over time in NCAA Division I soccer players. *International Sports Journal, 7*, 120–127.

LaMontagne, A. D., Shaw, A., Ostry, A., Louie, A. M., & Keegel, T. G (2006, May). Workplace stress in Victoria - developing a systems approach: Full report Victorian health promotion foundation, Melbourne (152 pages). Retrieved from

https://www.researchgate.net/publication/282235480

Langelaan, S., Bakker, A. B., van Doornen, L. J. P., & Schaufeli, W. B. (2006). Burnout and work engagement: Do individual differences make a difference? *Personality and Individual Differences, 40*, 521–532.

Larrivee, B. (2012). *Cultivating teacher renewal: Guarding against stress and burnout*. [Electronic resource]. Plymouth: Rowan and Littlefield.

Laverty, S. (2003). Hermeneutic phenomenology and phenomenology: A comparison of methodological and historical considerations. *International Journal of Qualitative Methods, 2*(3), 1-29. Retrieved from

http://www.ualberta.ca/~iiqm/backissues/2\_3final/pdf/laverty.pdf

Leana, C. R., & Barry, B. (2000). Stability and change as simultaneous experiences in organizational life. *Academy of Management Review, 25*(4), 753–759.

Lee, R. T., & Ashforth, B. E. (1990). On the meaning of Maslach’s three dimensions of burnout. *Journal of Applied Psychology, 75*, 743–747.

Lee, K. E., Shin, K. H. (2005). Job burnout, engagement and turnover intention of dietitians and chefs at a contract foodservice management company. *Journal of Community Nutrition, 7*, 100–106.

Leiter, M. P., & Maslach, C. (1999). Six areas of worklife: A model of the organizational context of burnout. *Journal of Health and Human Services Administration, 21*(4), 472–489.

Leiter, M. P., Maslach, C. A. (2005). Mediation model of job burnout. In: Antoniou ASG, Cooper CL, editors. *Research companion to organizational health psychology*. Cheltenham, UK: Edward Elgar, p. 544-564.

Leung, K. & Zhang, J. X. (1995). Systemic considerations: Factors facilitating and impeding the development of psychology in developing countries. *International Journal of Psychology, 30*(6), 693-706.

Lew, T. (2009). The relationships between perceived organisational support, felt obligation, affective organisational commitment and turnover intention of academics working with private higher educational institutions in Malaysia. *European Journal of Social Sciences, 9*(1), 72-87.

Lindseth, A., & Norberg A. A. (2004). Phenomenological hermeneutical method for researching lived experience. *Scandinavian Journal of Caring Sciences, 18*, 145–153.

Linzer, M., McMurray, J. E., Visser, M. R., Oort, F. J., Smets, E., De Haes, H. C. (2002). Sex differences in physician burnout in the United States and The Netherlands. *Journal of the American Medical Women's Association, 57*, 191-193.

Lizano, E. L., & Mor Barak, M. E. (2012). Workplace demands and resources as antecedents of job burnout among public child welfare workers: A longitudinal study. *Children and Youth Services Review, 34*(9), 1769–1776.

Llorens, S., Schaufeli, W. B., Bakker, A. B., & Salanova, M. (2007). Does a positive gain spiral of resources, efficacy beliefs and engagement exist? *Computers in Human Behavior, 23*, 825–841.

Lo, B. L. (2014). Stress, burnout and resilience of teachers of students with emotional behavioural challenges. *SpringerPlus, 3*(1), 1-2.

Loehlin, J. C. (2004). *Latent variable models: An introduction to factor, path, and structural analysis*, (4th Edition). Mahwah, NJ: Lawrence Erlbaum Associates.

Lois, J. (2006). Role strain, emotion management, and burnout: Homeschooling mothers’ adjustment to the teacher role*. Symbolic Interaction, 29*(4), 507–530.

Long, J. S. (1983). *Covariance structure models: An introduction to LISREL*. Beverly Hills, CA: Sage Publications.

Lortie, D. C. (1975). *Schoolteacher: A sociological study*. Chicago: University of Chicago

Press.

Louw, D.A., George, E., & Esterhuyse, K. (2011). Burnout amongst urban secondary school teachers in Namibia. *SA Journal of Industrial Psychology*, 37(1), 1-7.

Macey, W. H., & Schneider, B. (2008). The meaning of employee engagement. *Industrial and Organizational Psychology, 1*, 3–30.

Makikangas, A., Kinnunen, U., Feldt, T., & Schaufeli, W. (2016). The longitudinal development of employee well-being: A systematic review. *Work and Stress, 30*, 46- 70. 10.1080/02678373.2015.1126870

Marland, M. (2003). The transition from school to university: Who prepares whom, when and how? *Arts and Humanities in Higher Education 2*, 201–212.

Marquina, M., & Jones, G. A. (2015). Generational change and academic work: An introduction. *Studies in Higher Education 40*(8), 1349–1353. doi: 10.1080/03075079.2015.1064199

Martin, A. J., & Marsh, H. W. (2008). Workplace and academic buoyancy: Psychometric assessment and construct validity amongst school personnel and students. *Journal of Psychoeducational Assessment, 26*, 168–184.

Maslach, C., & Goldberg, J. (1998). Prevention of burnout: New perspectives. *Applied and Preventive Psychology, 7*, 63-74.

Maslach, C., & Jackson, S. E. (1981). The measurement of experienced burnout. *Journal of*

*Occupational Behavior, 2*, 99-113.

Maslach, C., & Jackson, S. E. (1984). Patterns of burnout among a national sample of public contact workers. *Journal of Health and Human Resources Administration, 7*(2), 189- 212.

Maslach, C. & Jackson, S. (1986). *Maslach Burnout Inventory Manual (2nd Ed.)*. CA: CPP, Inc. CA.

Maslach, C., & Leiter, M. P. (1997). *The truth about burnout*. San Francisco: Jossey-Bass.

Maslach, C., & Leiter, M. P. (2016). Understanding the burnout experience: recent research and its implications for psychiatry. *World Psychiatry, 15*(2), 103–111. http://doi.org/10.1002/wps.20311

Maslach, C., Schaufeli, W. B., & Leiter, M. P. (2001). Job Burnout. *Annual Review of Psychology, 52*, 397-422.

Mason, (2013, August 5). *The baby penalty.* The Chronicle of Higher Education Website. Retrieved from

https://www.chronicle.com/article/The-Baby-Penalty/140813

Masten, A. S. (2001). Ordinary magic: Resilience processes in development. *American*

*Psychologist, 56*, 227–238.

Masten, A., Best, K., & Garmezy, N. (1990). Resilience and development: Contributions from the study of children who overcome adversity. *Development and Psychopathology, 2*, 425-444.

Mauno, S., Kinnunen, U., Ruokolainen, M. (2007). Job demands and resources as antecedents of work engagement: A longitudinal study. *Journal of Vocational Behavior, 70*, 149– 171.

May, D. R., Gilson, R. L., & Harter, L. M. (2004). The psychological conditions of meaningfulness, safety and availability and the engagement of the human spirit at work. *Journal of Occupational and Organizational Psychology, 77*, 11-37.

McGarry, S., Girdler, S., McDonald A., Valentine J., Lee S.-L., Blair E., … Elliott C. (2013). Paediatric health-care professionals: Relationships between psychological distress, resilience and coping skills. *Journal of Paediatrics and Child Health, 49*, 725-732.

McGrath, A., Reid, N., & Boore, J. (2003). Occupational stress in nursing. *International Journal of Nursing Studies, 40*, 555-565.

McHugh, M. D., Kutney‐Lee, A., Cimiotti, J. P., Sloane, D. M., & Aiken, L. H. (2011). Nurses’ widespread job dissatisfaction, burnout, and frustration with health benefits signal problems for patient care. *Health Affairs, 30*(2), 202–210.

Mealer, M., Jones, J., & Moss, M. A. (2012). Qualitative study of resilience and posttraumatic stress disorder in United States ICU nurses. *Intensive Care Medicine, 38*, 1445-1451.

Meng, E. A. (1996). *Pendidkan di Malaysia 1: Falsafah Pendidikan: Guru dan sekolah [Education in Malaysia 1: National Education Philosophy: Teacher and school]*. Shah Alam, Malaysia: Penerbit Fajar Bakti Sdn.Bhd.

Menguc, B., & Bhuian, S. N. (2004). Career stage effects on job characteristic-job satisfaction relationships among guest worker salespersons. *Journal of Personal Selling and Sales*

*Management, 24*, 215–227.

Merril, B. (2001). Learning and teaching in universities: Perspectives from adult learners and lecturers. *Teaching in Higher Education, 6*, 5–17.

Miller, A. N., Taylor, S. G., & Bedeian, A. G. (2011). Publish or perish: Academic life as management faculty live it. *Career Development International, 16*(5), 422-445.

Ministry of Education Malaysia. (2001). *Falsafah Pendidikan Kebangsaan: Matlamat dan misi (National Education Philosophy: Goal and mission)*. Putrajaya, Malaysia: Curriculum Development Centre.

Ministry of Higher Education. (2007). *National Higher Education Action Plan 2007-2010: Triggering higher education transformation*. Retrieved from

http://planipolis.iiep.unesco.org/en/2007/higher-education-action-plan-2007-2010-triggering-higher-education-transformation-4197

Ministry of Higher Education Malaysia (2015). *Macro-higher education institutions*. Retrieved from URL: https://www.mohe.gov.my/en/

Minter, R. L. (2009). Faculty burnout. *Contemporary Issues in Education Research, 2*(2), 1-8.

Moghaddam, F. M. (1990). Modulative and generative orientations in psychology: Implications for psychology in the three worlds. *Journal of Social Issues, 46*, 21-41.

Mojsa-Kaja, J., Golonka, K., & Marek, T. (2015). Job burnout and engagement among teachers - work life areas and personality traits as predictors of relationships with work. *International Journal of Occupational Medicine and Environmental Health, 28*(1), 102-119.

Moore, J. E. (2000). Why is this happening? A causal attribution approach to work exhaustion consequences. *Academy of Management Review, 25*(2), 335-349.

Morris, D., Yaacob, A., & Wood, G. (2004). Attitudes towards pay and promotion in the Malaysian higher educational sector. *Employee Relations, 26*(2), 137-150.

Moustakas, C. (1994). *Phenomenological research methods*. Thousand Oaks, CA: Sage.

Muhr, T. (1991). ATLAS/ti – A prototype for the support of text interpretation. *Qualitative Sociology, 14*(4), 349-371.

Muthen, B., & Muthen, L. (2010). Integrating person-centered and variable-centered analysis: Growth mixture modeling with latent trajectory classes. *Alcoholism, Clinical and Experimental Research, 24*(6), 882–891.

Muthen, L. K., & Muthen, B. O. (2006). *Mplus user’s guide* (4th ed.). Los Angeles, CA: Muthen & Muthen.

Muthen, L. K., & Muthen, B. O. (2010). Mplus User’s Guide. Sixth Edition. Los Angeles, CA: Muthen & Muthen.

Nair-Venugopal, S. (2006). An interactional model of English in Malaysia: A contextualized response to commodification. *Journal of Asian Pacific Communication*, *16*(1), 51- 75.

Nedrow, A., Steckler, N. A., & Hardman, J. (2013). Physician resilience and burnout: Can you make the switch? *Family Practice Management, 20*(1), 25–30.

Nel, P., & Kotze, M. (2017). The influence of psychological resources on mineworkers’ levels of burnout in a remote and isolated mining town in South Africa. *The Extractive Industries and Society. 4*(4), 885-892.

Niehoff, M. S. (1984). Burnout and alcoholic treatment counselors. *Counseling and Values, 29*(1), 67-69.

Nooraini, O., & Khairul, A. M. (2011). Eclectic model in the Malaysian education system. *International Education Studies, 4*(4), 111-117. http://dx.doi.org/10.5539/ies.v4n4p111

Noordin, F., Othman, R., Mohd Jais, I. R., & Sardi, J. (2012). *Burnout, personality, and social support: A case of Malaysian Academics*. Paper presented at the International Conference on Trade, Tourism and Management (ICTTM'2012) December 21-22, 2012 Bangkok, Thailand.

Noordin, F., Wan Shukran, S. S., Abdul Hamid, S. M., & Hamali, J. (2013). *Burnout and academics: A case of a public university in Malaysia*. 4th International Conference on

Business and Economic Research (4th ICBER 2013). Proceeding 4-5 March 2013, Bandung, Indonesia.

Nunnally, J. (1978). *Psychometric theory*. New York: McGraw-Hill.

O’Sullivan, M. (2006). Professional lives of Irish physical education teachers: stories of resilience, respect, and resignation. *Physical Education and Sport Pedagogy, 11*, 265– 284.

Ologunde, A. O., Asaolu, T. O., & Elumilade, D. O. (2012). Labour turnover among university teachers in Southwestern Nigeria: Issue, solution and lessons. *International Journal of Humanities and Social Science, 2*(14), 1-21.

Organization Development (n.d.). *Developing and assisting members: Career stages, career planning, job pathing* [PowerPoint slides]. Retrieved from

http://www.zeepedia.com/read.php?developing\_and\_assisting\_members\_career\_stages\_career\_planning\_job\_pathing\_organization\_development&b=52&c=40

Othman, N., & Nasurdin, A. M. (2011). Work engagement of Malaysian nurses: Exploring the impact of hope and resilience. *International Journal of Social, Human Science and Engineering, 5*(12), 37–42.

Packirisamy, P., Meenakshy, M., Jagannathan, S. (2017). Burnout during early career: Lived experiences of the knowledge workers in India. *Journal of Enterprise Information Management, 30*(1), 96-121.

Pallant, J. (2001). *Spss survival manual: A step by step guide to data analysis using Spss for Windows (Version 10)*. Allen & Unwin, St Leonards, N.S.W.

Panatik, S., Rajab, A., Shaari, R., Shah, I. M., Rahman, H. A., & Zainal Badri, S. K. (2012). *Impact of work-related stress on well-being among academician in Malaysian Research University*. Meeting of International Conference on Education and Management Innovation. Singapore: IACSIT Press.

Patterson, J. H., Collins, L., & Abbott, G. (2004). A study of teacher resilience in urban schools. *Journal of Instructional Psychology, 31*(1), 3-11.

Peng, T. K., Peterson, M. F., & Shyi, Y. P. (1991). Quantitative methods in cross-national management research: Trends and equivalence issues. *Journal of Organizational Behavior, 12*, 87–107.

Pines, A.M. (2002). Teacher burnout: a psychodynamic existential perspective. *Teachers & Teaching, 8*(2), 121-140.

Plantiveau, C., Dounavi, K., & Virues-Ortega, J. (2018). High levels of burnout among early- career board-certified behavior analysts with low collegial support in the work environment. *European journal of behavior analysis.* doi: 10.1080/15021149.2018.1438339

Poncet, M. C., Toullic, P., Papazian, L., Kentish-Barnes, N, Timsit, J. F., Pochard, F.,… Azoulay, E. (2007). Burnout syndrome in critical care nursing staff. *American Journal of Respiratory and Critical Care Medicine, 175*(7), 698–704.

Portoghese, I., Galletta, M., Coppola, R. C., Finco, G., & Campagna, M. (2014). Burnout and workload among healthcare workers: The moderating role of job control. *Safety and Health at Work, 5*, 152-157.

Proost, K., de Witte, H., de Witte, K., Everts, G. (2004). Burnout among nurses: Extending the job demand-control-support model with work-home interference. *Psychologica Belgica, 44*, 269–288.

Qu, H., & Wang, C. (2015). Original article: Study on the relationships between nurses' job burnout and subjective well-being. *Chinese Nursing Research, 2*(2/3), 261-66.

doi:10.1016/j.cnre.2015.09.003

Quinsee, S., & Hurst, J. (2005). Blurring the boundaries? Supporting students and staff within an online learning environment. *The Turkish Online Journal of Distance Education, 6*(1), 1- 9.

Raykov, T., & Marcoulides, G. A. (2010). Group comparisons in the presence of missing data clinical applicability in older adults. *Archives of Psychiatric Nursing, 25*(1), 11-20.

Reddy, N. K., Vranda, M. N., Ahmed, A., Nirmala, B. P., & Siddaramu, B. (2010). Work– Life Balance among Married Women Employees. *Indian Journal of Psychological Medicine, 32*(2), 112–118.

Resnick, B. A., & Inguito, P. L. (2011). The resilience scale: Psychometric properties and clinical applicability in older adults. *Archives of Psychiatric Nursing, 25*(1), 11-20.

Ricoeur, P. (1976). *Interpretation theory. Discourse and the surplus of meaning.* Fort Worth, Texas: Texas Christian University Press.

Ricoeur, P. (2008). *From text to action*. London: Continuum.

Rivera-Torres, P., Araque-Padilla, R. A., & Montero-Simo, M. J. (2013). Job stress across gender: The importance of emotional and intellectual demands and social support in women. *International Journal of Environmental Research and Public Health, 10*, 375- 389.

Robinson, G. E. (2003). Stresses on women physicians: Consequences and coping techniques. *Depression and Anxiety, 17*(3), 180-189. doi:10.1002/da.10069

Roslan, N. A., Ho, J. A., Ng, S. I., & Sambasivan, M. (2015). Job demands & job resources: Predicting burnout and work engagement among teachers: *International Proceedings of Economics Development and Research IPEDR*. Singapore: IACSIT Press.

Rosnani, H. (2004). *Educational dualism in Malaysia: Implications for theory and practice*. Kuala Lumpur: The Other Press.

Rothmann, S., & Jordaan, G.M.E. (2006). Job demands, job resources and work engagement of academic staff in South African higher education institutions. *South African Journal of Industrial Psychology, 32*(4), 87−96.

Rozman, M., Treven, S., Cancer, V., & Cingula, M. (2017). Burnout of older and younger employees–the case of Slovenia. *The Organ, 50*(1), 47–62.

Rudman, A., & Gustavsson J. P. (2011) Early-career burnout among new graduate nurses: A prospective observational study of intra-individual change trajectories. *International Journal of Nursing Studies 48*(3), 292–306.

Saad, N., &, Zainol Ariffin, Z. (2016). Academic entrepreneurship behavior: The case of public Universities in Malaysia. *International Journal of Economics and Financial Issues,* 6(S6), 31-35.

Sabagh, Z., Hall, N. C., & Saroyan, A. (2018). Antecedents, correlates and consequences of faculty burnout, *Educational Research, 60*, 2, 131-156, doi: 10.1080/00131881.2018.1461573

Saidin, K., & Yaacob, A. (2016). Insider researchers: Challenges and opportunities. *International Seminar on Generating Knowledge through Research*.

Retrieved October 25, 2018 from

http://ojs.umsida.ac.id/index.php/icecrs.

Salami, S. O. (2011). Job stress and burnout among lecturers: Personality and social support as moderators. *Asian Social Science, 7*(5), 110- 121.

Saldana, J. (2003). *Longitudinal qualitative research: Analyzing change through time*. Walnut Creek, CA: AltaMira Press.

Salmela-Aro, K., Tolvanen, A., & Nurmi, J.-E. (2009). Achievement strategies during university studies predict early career burnout and engagement. *Journal of Vocational Behavior, 75*(2), 162-172.

Sander, C. (2017, January 17). *Common traits of a perfectionist personality type*. Retrieved from

https://owlcation.com/social-sciences/Common-Traits-of-a-Perfectionist-Personality-Type

Satorra, A., & Bentler, P. M. (2001). A scaled difference chi-square test statistic for moment structure analysis. *Psychometrika, 66*, 507-514

Schaefer, L., Long, J. S., & Jean Clandinin, D. (2012). Questioning the research on early career teacher attrition and retention*. Alberta Journal of Educational Research, 58*(1), 106-121.

Schaie, K. W. (1989). The hazards of cognitive aging. Gerontologist, 29, 484-493.

Schaufeli, W. B. (2003). Past performance and future perspectives of burnout research. *South African Journal of Industrial Psychology, 29*(4), 1-15.

Schaufeli, W. B., & Bakker, A. B. (2004). Job demands, job resources and their relationship with burnout and engagement: A multi-sample study. *Journal of Organizational Behavior, 25*(3), 293–315.

Schaufeli, W. B., Bakker, A. B., & Van Rhenen, W. (2009). How changes in job demands and resources predict burnout, work engagement, and sickness absenteeism. *Journal of Organizational Behavior, 30*, 893–917.

Schaufeli, W. B., & Buunk, B. P. (2003). *Burnout: An overview of 25 years of research and theorizing*. In The handbook of work and health psychology, ed. Schabracq, M. J.,

Winnubst, J. A. M., & Cooper, C. L., 2nd ed. Retrieved 23 August 2015 from

http://www.wilmarschaufeli.nl/publications/Schaufeli/181.pdf

Schaufeli, W. B., Leiter, M. P. & Maslach, C. (2009). Burnout: 35 years of research and practice. *Career Development International, 14*, 204–220.

Schaufeli, W. B., Martinez, I., Marques Pinto, A., Salanova, M., & Bakker, A. B. (2002). Burnout and engagement in university students: A cross national study. *Journal of Cross-Cultural Psychology, 33*, 464–481.

Schaufeli, W. B., Salanova, M., Gonzalez-Roma, V., & Bakker, A. B. (2002). The measurement of engagement and burnout: A two sample confirmatory analytic approach. *Journal of Happiness Studies, 3*, 71–92.

Schaufeli, W. B., & Taris, T. W. (2014). A Critical Review of the Job Demands-Resources Model: Implications for Improving Work and Health. In *Bridging Occupational, Organizational and Public Health*, edited by George F. Bauer, and Oliver Hämmig, 43-68, Berlin: Springer.

Schmeichel, B. J., Vohs, K. D., & Baumeister, R. F. (2003). Intellectual performance and ego

depletion: Role of the self in logical reasoning and other information processing. *Journal of Personality and Social Psychology, 85*(1), 33–46. doi:10.1037/0022- 3514.85.1.33

Schorn, N. K. & Buchwald, P. (2007). *Burnout in Student Teachers*. In P. Roussi, E. Vasilaki, K. Kaniasty, & J. D. Barker (Eds.), Electronic Proceedings of the 27th Conference of the STAR Society, 13-15 July 2006, University of Crete, Rethymnon (pp. 150 - 159).

Schumacker, R. E., & Lomax, R. G. (2004*). A beginner's guide to structural equation modeling*, Second edition. Mahwah, NJ: Lawrence Erlbaum Associates.

Schuster, J. H., & Finkelstein, M. J. (2006). *The American faculty: The restructuring of academic work and careers* [Electronic version]. Baltimore, MD: Johns Hopkins University Press. Retrieved from

https://www.york.ac.uk/library

Schutte, N., Toppinen, S., Kalimo, R., & Schaufeli, W. B. (2000). The factorial validity of the Maslach Burnout Inventory—General Survey (MBI-GS) across occupational groups and nations. *Journal of Occupational and Organizational Psychology, 73*, 53–66.

Seidman, S. A. & Zager, J. (1991). A study of coping behaviors and teacher burnout. *Work and Stress, 5*, 205–216.

Seligman, M. E. P. (2005). *Positive psychology, positive prevention, and positive therapy*. In C. R. Snyder & S. J. Lopez (Eds.), Handbook of positive psychology [electronic resource]. New York: Oxford University Press.

Seligman, M. E. P., & Csikszentmihalyi, M. (2000). Positive psychology: An introduction. *American Psychologist, 55*, 5-14.

Seligman, M. E. P., Steen, T. A., Park, N. & Peterson, C. (2005) Positive Psychology progress: Empirical validation of interventions. *American Psychologist, 60*, 410–421.

Sethi, V., Barrier, T. A., & King, R. C. (1999). An examination of the correlates of burnout in information systems professionals. *Information Resources Management Journal, 12*(3), 5-14.

Shimazu, A., Schaufeli, W. B., Miyanaka, D., & Iwata, N, (2010). Why Japanese workers show low work engagement: An item response theory analysis of the Utrecht Work Engagement scale. *BioPsychoSocial Medicine, 4*, 1–6.

Shuy, R. W. (2002). *In-person versus telephone interviewing*. In J. F. Gubrium, & J. A. Holstein (Eds.), Handbook of interview research: Context and method. Thousand Oaks, CA: Sage.

Simbula, S., Guglielmi, D., & Schaufeli, W. B. (2011). A three-wave study of job resources, self-efficacy, and work engagement among Italian schoolteachers. *European Journal of Work and Organizational Psychology, 20*(3), 285-304.

Singh, S. N., Dalal, N., & Mishra, S. (2004). Research burnout: A refined multidimensional scale. *Psychological Reports, 95*, 1253‐1263.

Singh, S. N., Mishra, S., & Kim, D. (1998). Research-related burnout among faculty in higher education. *Psychological Reports, 83*, 463–473.

Smith, G. (2002). Place-based education: Learning to be where we are. *Phi Delta Cappan, 83*(8), 584–594.

Smith, J. A., & Osborn, M. (2003). *Interpretative phenomenological analysis*. In J.A. Smith (Ed.), Qualitative psychology – a practical guide to research methods (pp. 51‐80). London: Sage.

Sonnentag, S. (2003). Recovery, work engagement, and proactive behaviour: A new look at the interface between nonwork and work. *Journal of Applied Psychology, 88*, 518- 528.

Sonnentag, S., & Kruel, U. (2007) Psychological detachment from work during off-job time: The role of job stressors, job involvement, and recovery-related self-efficacy. *European Journal of Work and Organizational Psychology, 15,* 2, 197-217. doi: 10.1080/13594320500513939

Sonnentag, S., Unger, D., & Nagel, I. J. (2013). Workplace conflict and employee well- being: The moderating role of detachment from work during off-job time. *International Journal of Conflict Management, 24*(2), 166-183. doi: 10.1108/10444061311316780

Sorensen, T. J., & McKim, A. J. (2014). Perceived work-life balance ability, job satisfaction, and professional commitment among agriculture teachers. *Journal of Agricultural Education, 55*(4), 116-132.

Stanetic, K., & Tesanovic, G. (2013). Influence of age and length of service on the level of stress and burnout syndrome. *Medicinski Pregled, 3–4*, 153-162.

Starks, H., & Brown, S. B. (2007). Choose your method: A comparison of phenomenology, discourse analysis, and grounded theory. Qualitative Health Research, 17(10), 1372– 1380.

Staudinger, U. M., Marsiske, M., & Baltes, P. B. (1993). Resilience and levels of reserve capacity in later adulthood: Perspectives from life-span theory. *Development and Psychopathology, 5*, 541-566.

Staudinger, U. M., Marsiske, M., & Baltes, P. B. (1995). *Resilience and reserve capacity in later adulthood: potentials and limits of development across the life span*. In Developmental Psychopathology Vol. 2: Risk, Disorder, and Adaptation, ed. D Cicchetti, D Cohen, pp. 801–47. New York: Wiley.

Stokes, H. & Wyn, J. (2007). Constructing identities and making careers: Young peoples perspectives on work and learning. *International Journal of Lifelong Education, 26*, 5, 495-511.

Tabachnick, B. G., & Fidell, L. S. (2001). *Using multivariate statistics*. Boston: Allyn and Bacon.

Tang, C. S-K., Au, W-T., Schwarzer, R., & Schmitz, G. (2001). Mental health outcomes of job stress among Chinese teachers: Role of stress resource factors and burnout. *Journal of Organizational Behavior, 22*, 887-901.

Taris, T. W., Schreurs, P. J. G., & Van Iresel-van Silfhout, I. J. (2001). Job stress, job strain, and psychological withdrawal among Dutch university staff: Towards a dual process model for the effects of occupational stress. *Work & Stress, 15*, 283-296.

Tavakol, M., & Dennick, R. (2011). Making sense of Cronbach’s alpha. *International Journal of Medical Education, 2*, 53–55. http://doi.org/10.5116/ijme.4dfb.8dfd

Taylor, R. (1990). Interpretation of the correlation coefficient: A basic review. *The Journal of Defence Modelling and Simulation, 1*, 35–39.

Taylor, B., Zimmer, C., & *Womack, S. T. (2005). Strategies to prevent teacher stress and burnout: Online Submission*. Retrieved August 22, 2015 from EBSCOHost database on the World Wide Web: http://www.ebsco.com

Thakur, I. (2018). Relationship between workload and burnout of special education teachers. *Pakistan Journal of Distance & Online Learning, 4*(1), 235-242.

Thomson, R., Plumridge, L., & Holland, J. (2003) Editorial: Longitudinal qualitative research: A developing methodology. *International Journal of Social Research Methodology, 6*(3), 185-187. doi: 10.1080/1364557032000091789

Thornton, M. (2013). The mirage of merit. *Australian Feminist Studies, 28*(76), 127-143.

Tian, M., Su, Y., & Ru, X. (2016) Perish or publish in China: Pressures on young Chinese scholars to publish in internationally indexed journals. *Publications, 4*, 1-16.

Tijdink, J. K., Vergouwen, A. M., & Smulders, Y. M. (2013). Publication pressure and burn out among Dutch medical professors: A nationwide survey. *PLoS ONE, 8*(9), e73381. doi:10.1371/journal.pone.0073381

Tijdink, J. K., Vergouwen, A. C. M., & Smulders, Y. M. (2014). Emotional exhaustion and burnout among medical professors: A nationwide survey. *BMC Medical Education, 14*(1), 183-192.

Toker, B. (2011). Burnout among university academicians: An empirical study on the universities of Turkey. *Dogus Universitesi Dergisi, 12*(1), 114-127.

Toppinen-Tanner, S., Kalimo, R., & Mutanen, P. (2002). The process of burnout in white- collar and blue-collar jobs: Eight-year prospective study of exhaustion. *Journal of Organizational Behavior, 23*(5), 555-570.

Triandis, H. C. (2004). The many dimensions of culture. *Academy of Management Executive, 18*, 88–93.

Triandis, H. C., & Suh, E. M. (2002). Cultural influences on personality. *Annual Review of Psychology, 53*, 133–160.

Tugade, M. M. & Fredrickson, B. L. (2004). Resilient individuals use positive emotions to bounce back from negative emotional experiences. *Journal of Personality and Social Psychology, 86*(2), 320-333.

Tytherleigh, M. Y., Webb, C., Cooper, C. L., & Ricketts, C., (2005). Occupational stress in UK higher education institutions: A comparative study of all staff categories. *Higher Education Research and Development, 24*(1), 41–61.

Ullman, J. B. (2001). Structural equation modeling. In Tabachnick B. G. & Fidell, L. S. (2001). *Using Multivariate Statistics* (4th ed & pp 653- 771). Needham Heights, MA: Allyn & Bacon.

United States Office of Personnel Management (2006). *Career patterns: A 21st century approach to attracting talent*. Retrieved August 24, 2015 from

http://www.opm.gov/hcaaf\_resource\_center/careerpatterns/CPGuideV1.pdf

University of East Anglia. (2016, June 27). Study explores emotional intelligence and stress in social work. *ScienceDaily*. Retrieved November 5, 2018 from www.sciencedaily.com/releases/2016/06/160627214253.htm

Van de Vijver, F. J. R., & Leung, K. (2000). Methodological issues in psychological research on culture. *Journal of Cross-Cultural Psychology, 31*, 33-51.

Vandenberghe, R., & Huberman, M. A. (Eds.). (1999). *Understanding and preventing teacher burnout: A sourcebook of international research and practice*. Cambridge, UK: Cambridge University Press.

Van Dierendonck, D., Schaufeli, W. B., & Buunk, B. P. (2001). Burnout and inequity among human service professionals: A longitudinal study. *Journal of Occupational Health Psychology, 6*(1), 43-52.

Van Droogenbroeck, F. & Spruyt, B. (2015). Do teachers have worse mental health? Review of the existing comparative research and results from the Belgian Health Interview Survey. *Teaching and Teacher Education, 51*, 88-100.

Van Horn, J. E., Schaufeli, W. B., & Enzmann, D. (1999). Teacher burnout and lack of reciprocity. *Journal of Applied Social Psychology, 29*, 91–108.

Vesty, G., Sridharan, V. G., Northcott, D., & Dellaportas, S. (2015). *Burnout among university accounting educators in Australia and New Zealand: Determinants and Implications.* Accounting & Finance. doi: 10.1111/acfi.12203

Wagnild, G., & Young, H. (1993). Development and psychometric evaluation of the Resilience Scale. *Journal of Nursing Measurement, 1*, 165-178.

Wagnild, G. M. (2016). *The Resilience Scale user's guide for the US English version of the Resilience Scale and the 14-Item Resilience Scale*. Woren, Montana: Resilience Centre.

Watts, J., & Robertson, N. (2011). Burnout in university teaching staff: A systematic literature review. *Educational Research, 53*(1), 33-50.

White, M. (2011). *Rethinking generation gaps in the workplace: Focus on shared values*. Retrieved February 10, 2014, from https://www.kenanflagler.unc.edu/executive-development/custom-programs/~/media/C8FC09AEF03743BE91112418FEE286D0.ashx

Windle, G. (2011). What is resilience? A review and concept analysis. *Reviews in Clinical Gerontology, 21*, 151–169.

Winefield, H. R., Boyd, C., & Winefield, A. H. (2014). Work-family conflict and well- being in university employees. *The Journal of Psychology, 148*, 683–697. doi:10.1080/00223980.2013.822343

Winefield, A. H., Gillespie, N., Stough, C., Dua, J., Hapuarachchi, J., & Boyd, C. (2003). Occupational stress in Australian university staff: Results from a national survey. *International Journal of Stress Management, 10*(1), 51-63.

Wong, A. V. (2017). Burnout and resilience in anaesthesia and intensive care medicine. *British Journal of Anaesthesia, 17*(10), 334–340. doi: 10.1093/bjaed/mkx020

Wong, S., DeSantics, G., & Staudemayer, N. (2007). The relationship between task interdependency and role stress: A revisit of the job demands-control model. *Journal of Management Studies, 44*, 284–303.

World Bank, (2007, March 9). *Malaysia and the Knowledge Economy: Building a World- Class Higher Education System*. Human Development Sector Reports, East Asia and Pacific Region. New York: World Bank; Report No.: 40397. Retrieved from

http://documents.worldbank.org/curated/en/193361468774848408/Malaysia-and-the-knowledge-economy-building-a-world-class-higher-education-system

Xanthopoulou, D., Bakker, A. B., Demerouti, E., Schaufeli, W. B. (2007). The role of personal resources in the job demands-resources model. *International Journal of Stress Management, 14*, 121-141.

Xanthopoulou, D., Bakker, A. B., Heuven, E., Demerouti, E., & Schaufeli, W. B. (2008). Working in the sky: A diary study on work engagement among flight attendants. *Journal of Occupational Health Psychology, 13*, 345-356.

Yashwant Advani, Y., Jagdale, S. C., Kumar Garg, A., & Kumar, R. (2005). Antecedents and consequences of "burnout" in services personnel. *South Asian Journal of Management, 12*(3), 21-35.

Yerdelen, S., Durksen, T., & Klassen, R. M. (2018). An international validation of the engaged teacher scale. *Teachers and Teaching*. Advance Online Publication. doi:10.1080/13540602.2018.1457024

Ylijoki, O. H. (2013). Boundary-work between work and life in the high-speed university. *Studies in Higher Education, 38*, 242–255. doi:10.1080/03075079.2011.577524

Yurur, S. & Sarikaya, M. (2012). The effects of workload, role ambiguity, and social support on burnout among social workers in Turkey. *Administration in Social Work, 36*(5), 457-478

Zahra, S., Irum, A., Mir, S., Chishti, A. (2013). Job satisfaction and faculty turnover intentions: A case of Pakistani universities. *Journal of Business and Management, 9*(2), 83-89.

Zapf, D., & Holz, M. (2006). On the positive and negative effects of emotion work in organizations. *European Journal of Work and Organizational Psychology, 15*(1), 1– 28.

Zhang, L. F. (2007). Teaching styles and occupational stress among Chinese university faculty members. *Educational Psychology, 27*(6), 823-841.

Zhang, Y., Gan, Y., & Cham, H. (2007). Perfectionism, academic burnout and engagement among Chinese college students: A structural equation modeling analysis. *Personality and Individual Differences 43*, 1529-1540.

Zunz, S. J. (1998). Resiliency and burnout: Protective factors for human service managers. *Administration in Social Work, 22*, 39-54.