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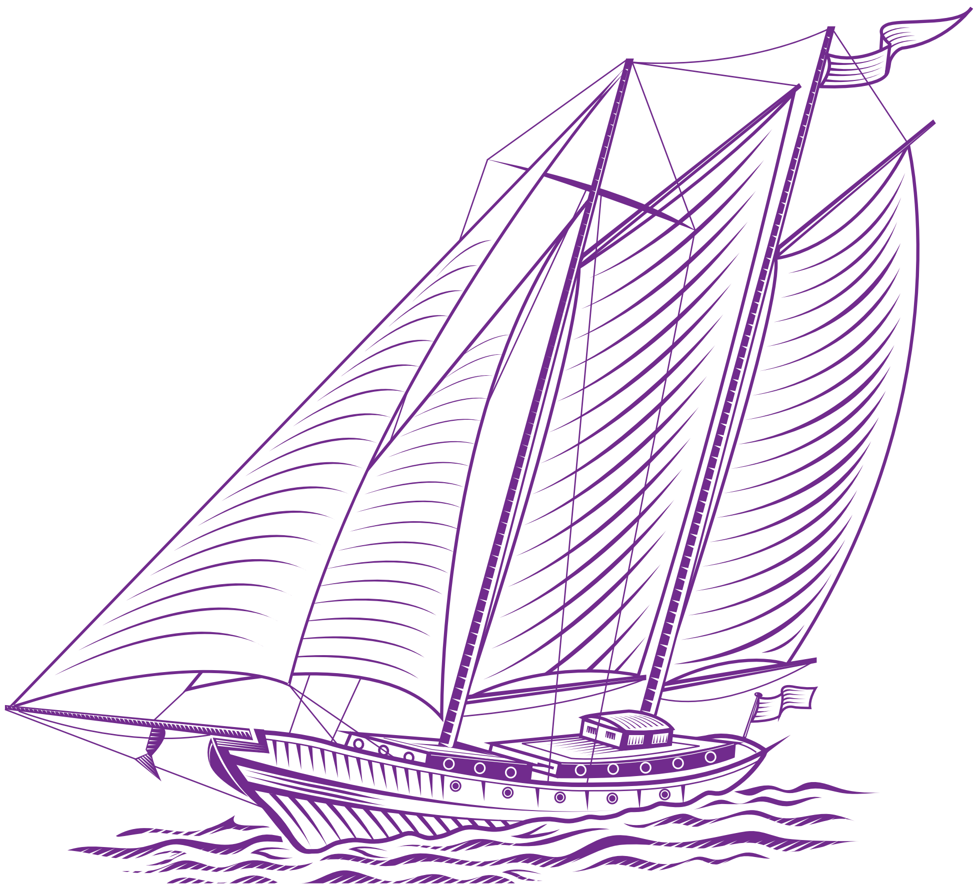

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Leadership for Sustainable Economy, Business and Society in Emerging Economies

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21ST CENTURY EMERGING LEADERSHIP COMPETENCIES IN MALAYSIAN HIGHER LEARNING INSTITUTIONS

CHOW TONG WOOI[1], SULAMAN HAFEEZ SIDDIQUI[2], HIJATTULAH ABDUL JABBAR[3], MUHAMMAD SHAHID NAWAZ[4]

ABSTRACT. Purpose: This paper explores the 21st-century emerging leadership competencies in a Malaysian higher learning institution. As the forces of change are transforming the leadership landscape, new leadership capabilities are required for the 21st-century evolving globalized environment. Hence, research is needed to determine the key emerging leadership competencies in the higher learning institutions. **Findings:** The significance of the results were the relevance of the leadership competency concept in the context of higher learning institution, future leaders need competencies for effective leadership, and the core competencies of academic leaders are necessary. Additionally, besides the discussion on the emerging leadership competencies of visioning and strategic thinking, leadership agility, adaptability and change, relationship and collaboration, the *new findings* from the field data were corporate leadership and cross-cultural competence. **Research limitations/implications:** This qualitative case study focused on one higher learning institution. At the same time the research also provided the in-depth context-rich information. **Practical implications:** The knowledge and adoption of the emerging leadership competencies concept would enhance the development of progressive leadership.

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Originality/value: There is limited study on the emerging leadership competencies in the higher learning institutions. Hence, there is value in this research. The findings were *original* contributions to knowledge. Also, this study showed the link between the expected attributes of institutional leadership to the dimensions of transformational leadership and the key emerging leadership competencies.

Keywords: *Emerging leadership competencies, higher education, progressive leadership.*

JEL Classification: L290

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Introduction

Literature has shown that the performances of organizations are attributed to leadership capabilities (Pradham & Pradhan, 2015; Yildiz, Basturk, & Boz, 2014). However, there are many challenges confronting the leaders and the organizations. These challenging factors have an effect on the changing leadership landscape and environment which were attributed to the effects of the forces of change. The forces of change include globalization, advancement of technology, speed of change, and scientific and social changes (Ivancevich, Konopaske, & Matteson, 2014; Mursal, Idaya, & Dahie, 2016; Wayland, 2015). Leadership in the 21st century has evolved (Pang, 2013; Van Wart, 2013). These changes result in uncertainty and ambiguity (Bennett & Lemoine, 2014; Petrie, 2014). These evolving trends are causing those concerns to rethink the appropriateness of effective organizational leadership for performance (Boatman & Wellins, 2011). New challenges require new approaches (O'Connell, 2014; Pisapia, 2009).

Scholars have indicated that leading in the 21st-century necessitate an evaluation of leadership practices (Black, 2015; Day, Fleenor, Atwater, Sturm, & McKee, 2014). There is a need to consider a *new* blueprint and construct to navigate the uncharted terrain of the changing environment (Darling & Cunningham, 2016; Marques, 2015; Pang, 2013). Different and specific skills may be needed instead (Jogulu, 2010; Petrie, 2014; Van Wart, 2013). It is pertinent to highlight that the leadership competency theorists were proposing the leadership competency approach as the viable option for effective and progressive leadership (De Beeck & Hondeghen, 2009; Mumford, Campion, & Morgeson, 2007; Tucker & Lam, 2014; Szeto, Lee, Hallinger, 2015). Leadership needs to reflect the reality of the times and environment.

There were calls for more research to be conducted in the Asian context in understanding the Asian leadership practices (Arvey, Dhanaraj, Javidan, & Zhang, 2015; Kennedy & Mansor, 2000; Yammarino, 2013). Traditionally, most leadership theories originated and was conducted in the western industrialized world (Arvey et al., 2015; Jogulu & Ferkins, 2012; Oc, 2017). As such, the question of the suitability of leadership application outside of the western culture was questioned. At the same time, though there were the various related leadership studies carry out in the Malaysian context, however, there are still the lacked studies in organizational leadership, using the competency approach (Ansari, Ahmad, & Aafaqi, 2004; Boyatzis, 2008; Jogulu & Ferkins, 2012).

In the past, research on leadership was examined from the various leadership theoretical perspectives across the different industries including the higher education sector. Some of the research in educational institutions focused on leadership models and styles such as hierarchical, lessez-faire, academic, individual, transactional, transformational, distributed, collaborative or other related leadership behaviors either task-oriented, development-orientated, and relations-oriented (Alonderiene & Majauskaite, 2016; Anthony & Anthony, 2017; Black, 2015). Most of these theories of educational leadership were derived from the corporate practice. However, there were limited studies on the emerging leadership competencies in the higher education sector (Alonderiene & Majauskaite, 2016; Chow, Salleh, & Ismail, 2017a; De Beeck & Hondeghem, 2009; Middlehurst, Goreham, & Woodfield, 2009; Nair, 2012).

The concept of effective leadership in the higher learning institution is changing. There are new expectations of leaders in managing the universities (MEB 2015-2025 (HE) 2015; UniTP, Orange Book, 2016). The complex challenges in the higher education leadership require the appropriate leadership competencies (Anthony & Anthony, 2017; Alongerie & Majauskaite, 2016; Rasul Jan, 2014; Shahmandi, Silong, Ismail, Samah, & Othman, 2011). Researchers were proposing that leading in the globalized world requires the emerging leadership competencies. (Bennett & Lemoine, 2014; Chow et al., 2017a; De Beeck & Hondeghem, 2009). At the same time, there were suggestions for the leadership competency concept as viable option for effective leadership (Chow et al., 2017a; Northouse, 2013). There is a need to review the current leadership competencies in the higher learning institutions (Bird, & Mendenhall, 2015; Rasul Jan, 2014; Tucker & Lam, 2014). Hence, research is needed to determine the key emerging leadership competencies for effective leadership in the higher education institutions (Almatrooshi, Singh, & Farouk, 2016; Middlehurst et al., 2009). This study is about exploring on the emerging leadership competencies in the context of a selected Malaysian higher learning institution in light of the 21st-century globalized environment for leadership development and practice. Specifically, the research question used to guide the enquiry is: What are the emerging leadership competencies in the higher learning institution?

Literature Review

The overview of literature shows that the nature of leadership has evolved over the past decades. Researchers have used the different theoretical approaches and concepts to categorize the complex study of leadership such as paradigms, frameworks, models, eras, and school of thoughts (Dinh et al., 2014; Dionne et al., 2014). The focus of the theoretical concepts in each period shows the emphasis of the teaching and approach. Furthermore, with regards to theories scholars were stressing that newer theories will eventually emerge to replace the older theories (Yammarino, 2013). Dinh et al. (2014) in their research on leadership theories identified a total of sixty (67) theories, where forty-one (41) were classified as established theories and 26 as emerging theories.

There is consensus that leadership plays a significant role on the efficiency and performance of organizations (Muijs, 2011; Pradhan & Pradhan, 2015; Yuen Lee, 2011). Researchers stressed that leadership contributed to about forty-five per cent (45%) of an organization's performance (Howell & Coastley, 2006). In short, leadership has an impact on organizational performance. There are suggestions that there are link between leadership competencies and organizational performance outcomes (Almatrooshi et al., 2016; Pradhan & Pradhan, 2015; Yildiz et al., 2014). The review of literature of this study includes the highlight of the 21st-century paradigm, the integrative strategies of conceptualizing leadership, leadership in the higher education institutions, the transformational leadership, cross-cultural leadership, the leadership competency concept, and the proposed emerging leadership competencies.

The 21st-century leadership paradigm

The 21st-century is also referred to as the *knowledge* era. The new millennium leadership landscape has also resulted in the complex environment because of the increase changes at work (Lussier & Achua, 2016; O' Connell, 2014). The changes include the paradigm shifts in many spheres from the industrial era to the knowledge economy (Ross, 1991; Uhl-Bien, Marion, & McKelvey, 2007). These changes have an impact on organizations and leadership behaviours. Thus, a simplistic and a conventional approach towards understanding leadership is inadequate. The old leadership mind-set is not in congruent with the times (Ashkenas, Siegal, & Spiegel, 2013; Petrie, 2014). Leadership thinking needs to change for strategic purposes so as to be able to compete for optimum results.

In understanding the new paradigm of leadership, there must be the acceptance of the evolving nature of leadership (O'Connell, 2014; Van Wart, 2013). The changed in paradigm would also result in adopting the appropriate leadership style. Leaders were urged to adopt a new mind-set of *adaptive thinking* in organizational leadership in the new era environment (Pisapia, 2006; 2009). Effective leaders must recognize the new reality of the times as it has shaped the face of leadership (Ashkenas et al., 2013; Marques, 2015). The 21st century contemporary leaders should shift their reference point of evaluation and benchmark to be strategic and competitive in tandem with the times (Mosley & Matviuk, 2010; O'Connell, 2014; Pisapia, 2009).

The Integrative Strategies of Conceptualizing Leadership

Leadership researchers were advocating that leadership development in the new millennium ought to be innovative and dynamic (Black, 2015; Day et al., 2014; Petrie, 2014). They were highlighting for an *integrative strategies* approach of building theory (Avolio, 2007; Dinh et al., 2014;

Gerard, Mcmillan & D'Annunzio-Green, 2017). Essentially, the integrative perspectives are based on the theories, related knowledge, and how the concepts relate to the emergence of *new* leadership construct to advance leadership. The new emerging leadership concept of this study included the incorporation of the theories, the key emerging leadership competencies, and current knowledge. This proposal offers an alternative leadership framework that is viable for today's world as well as for the future reference (Darling & Cunningham, 2016; Gerard et al., 2017). The integrated strategies approach was advocated by the different researchers such as Avolio (2007), Dinh et al., (2014), Weiss & Molinaro, (2006), and Van Seters & Field, (1990). There is contention that the complex globalized 21st-century landscape demands such an integrated leadership capability (Pisapia, 2009; Van Wart, 2013). This study resulted in the emerging leadership competencies concept that combined the respective leadership theoretical concepts to form a comprehensive sustaining leadership construct.

In recent times there have been calls by researchers to include the sustainability element in leadership development (Galpin, Whittington, & Bell, 2017). The essence of sustainability development incorporates the long-term consideration for leaders, organizations, and the systems employing sustainable principles (Rogers, 2011). There are discussions of the place of leadership competencies as influencing sustainable development (Tabassi et al., 2016). The conceptualization of the emerging leadership competencies concept of this study encapsulates the underlying principles of sustainable development in the various related aspects accordingly.

Leadership in the Higher Education Institutions

Organizations of all types are identifying methods that would lead to successful outcomes (Taylor, Cornelius, & Colvin, 2014). The higher education sector is also experiencing many challenges because of its values, goals, and complexities. It is imperative for leaders to be aware of the changed environment; the challenges faced and develop the leadership capacity for performance (Boatman & Wellins, 2011; Shahmandi et al., 2011). The development of the knowledge, competencies, and skills would contribute towards effective leadership in the higher learning institutions (MEB 2015-2025 (HE) 2015; UniTP, Orange Book, 2016; Mohd, 2013).

In terms of organizational sector, leadership research in the past was mainly conducted in the military and business sector (Birnhaum, 1988). Leadership studies in the higher education are considered as still in the relatively early stage in comparison to leadership studies (Middlehurst, 2012). Furthermore, it is said that leadership practices employed at the higher education were generally adapted from the business field (Spendlove, 2007). However, there are differences and uniqueness between the educational institutions and the other types of organizations. There are factors involved that makes leadership in the higher education distinctive such as policy issues, economic, and social dynamic (Ghasemy, Hussin, & Daud, 2016). Another significant point raised in literature is that there is scarce research on leadership in the higher education sector particularly the emerging leadership competencies (Middlehurst et al., 2009). At the same time the higher education landscape is also changing in the past two (2) decades (Alonderience & Majauskaite, 2016; Chinta, Kebritch, & Elias, 2016; Pang, 2013).

Transformational leadership

The transformational leadership has emerged as one of the dominant leadership paradigms adopted for leadership practice across the various sectors in the last twenty years (Black, 2015; Giddens, 2017). The essence of transformational leadership concerns the effect of change on the organization and people (Muijs, 2011). Research has shown that transformational leadership has proven to be effective world-wide and preferred in contrast to other leadership theories (Deinert, Homan, Boer, Voelpel, & Gutermann, 2015). There was also evidence that transformational leadership is effective universally and accepted in the education field (Alonderiene & Majauskaite, 2016; Giddens, 2017; Litz, 2011). Research has shown that the Malaysian cultural context and values is likely to support the transformational leadership paradigm (Jogulu & Ferkins, 2012; Wahab, Rahmat, Yusof, & Mohamed, 2016).

There was indication that transformational leadership has been promoted implicitly as the preferred leadership approach for leaders in the Malaysian higher learning institutions (MEB 2015-2025 (HE) (2015). This study linked the behaviors of the expected excellence institutional leader highlighted in the publication by the Malaysian Ministry of Higher Education, to the four dimensions of the transformational leadership, leading to the key emerging leadership competencies of this study (MEB 2015-2025 (HE) (2015; UniTP, Orange Book, 2016). The four dimensions of transformation leadership are inspirational motivation, intellectual stimulation, idealized influence, and individual consideration (Giddens, 2017; Pawar, 2016; Wahab et al., 2016).

Cross-cultural leadership

There are values in the understanding of cross-cultural competence in leadership practice (Chow, Salleh, & Ismail, 2017b; Bartel-Radic & Giannelloni, 2017). Schein (1992) states, "Leadership and culture are intertwined" (p. 273). Culture has an effect on leadership styles, behaviours, and effectiveness (Hanges, Aiken, Park, & Su, 2016; House, Hanges, Javidan, Dorfman, & Gupta, 2004). Researchers were advocating for an integrated perspective of cross-cultural perspective in management including research in educational leadership (Brooks & Jean-Marie, 2015; Szeto et al., 2015). The interconnectedness of today's globalized world has resulted in the cultural diversity of organizational setting and society. Hence, is it needful to understand the cross-cultural factors in the exercise of effective leadership.

Research has shown that cross-cultural competency has been identified as one of the key capabilities required for professional success in the future (Future Work Skills 2020, 2011). According to Livermore (2010) a high percentage of ninety percent (90%) of leaders from sixty-eight (68) nations considered cross-cultural leadership as a priority in the coming century. Culture-research focus in international business is becoming increasingly important (Shi & Wang, 2011). It is necessary for leaders in the Malaysian organizational context to inculcate a multi-cultural understanding of leadership (Jogulu & Ferkins, 2012; Selvarajah & Meyer, 2008). A sense of cultural intelligence, intercultural competency, and adaptability is an asset for those in leadership (Bartel-Radic & Giannelloni, 2017; Maldonado & Vera, 2014; Nunes, Felix, & Prates, 2017). The understanding of culture facilitates leaders to apply the appropriate principles of leadership practice that *transcends* culture (Chow et al., 2017b; Gurban & Tarasyev, 2016; Middlehurst, 2012). It is an asset for leaders in the 21st-century to be competent cross-culturally to interact and excel in the present-day interconnected societies (Northouse, 2013).

Leadership competency theory

Over the years, the competency model has emerged as a significant leadership concept. The development of the competency approach is credited to David McClelland, a Harvard University professor. Northouse (2013) stressed that the skill-based approach is a focused way of developing effective leadership. Leadership competency has been linked to the *quality* of leadership (Boatman & Wellins, 2011; Chow et al., 2017a). Most of the definitions of competency have to do with effectiveness and superior performance (Hoffman, 1999; McClelland, 1973; Sutton & Watson, 2013). The competency concept forms the theoretical base for the emerging leadership competencies (Goldman, Schlumpf, & Scott, 2017; Vizirani, 2010). Researchers further predicted that due to the many changes in many organizational sectors, there will be *more focus* on the emerging leadership competencies (Chow et al., 2017a; De Beeck & Hondeghem, 2009; Ivancevich et al., 2014). In addition, the leadership competencies can be leverage on to develop a leadership distinctiveness of the organization (Intagliata, Ulrich, & Smallwood, 2000).

Key emerging leadership competencies

Studies have shown that the 21st-century leaders and organizations need the emerging leadership competencies (Bennett & Lemoine, 2014; Dinh et al., 2014; Van Wart, 2013). As the leadership landscape continues to change and emerging leadership competencies are expected to emerge (Ivancevich et al., 2014; Visagies Linde, & Havenga, 2011). Leadership for best practice will evolve (Hagermann & Stroope, 2013; UniTP, Orange Book, 2016). It is necessary to explore on the key emerging leadership competencies that contribute to leadership advancement (Almatrooshi et al., 2016; Bird & Mendenhall, 2016; Black, 2015; Van Wart, 2013). Traditional leadership skills of the past are not enough to navigate the challenging changing environment (Boatman & Wellins, 2011; Visagie et al., 2011).

Leadership approaches for the knowledge era need to be in concert with the environment (Marques, 2015; Ashkenas et al., 2013). Future leaders are advised to develop in the key competencies that contribute to performance (Black, 2015; UniTP, Orange Book, 2016). Some of the emerging competencies such as adaptive thinking, social intelligence, cross-cultural competence, and collaboration were considered as key competencies for progressive leadership aim for professional success (Future Work Skills 2020, 2011; Tucker & Lam, 2014). This section on the emerging leadership competencies focuses on these competencies of visioning and strategic thinking, leadership agility, adaptability and change, and relationship and collaboration. These theoretical concepts of strategic, adaptive, and relational leadership are considered as emerging concepts (O'Connell, 2014; Wagner, 2008).

Visioning and strategic thinking

The concept of visioning is linked to strategic thinking. Visioning and strategic thinking plays a crucial role in leadership. Vision is a result of strategic thinking. Strategic thinkers were described as visionaries. Strategic thinking is essential to leadership (Goldman & Scott, 2016, 2017; Pang & Pisapia, 2012; Petrie, 2014). Fundamentally, visioning and strategic thinking is the abilities to create a future goal, direction, and effectiveness for the organization (Szeto et al., 2015; Vecchiato, 2014). Visions are like compass that shows the organization its desired direction or goal for the future while strategies involve the various plans formulated to achieve the desired outcomes.

Leadership agility

The notion of agility connotes the idea of the capability to excel in an uncertain and unpredictable environment (Bennett & Lemoine, 2014; McPherson, 2016). Literature highlighted that the two main attributes of the definition of agility are flexibility and adaptability (Sherehiy, Karwowski & Layer, 2007). In addition, leadership agility has been described as the leadership abilities consisting of the characteristics of "robustness, resilience, responsiveness, flexibility, innovation, and adaptation" (As cited in Alberts, 2007). Leadership agility is the capability to navigate the complex situations in sustaining the direction and stability (McPherson, 2016). Essentially, it is the leadership skill of the leader to lead well even in a fast changing and complex environment (Bennett & Lemoine, 2014; Joiner & Josephs, 2007; Mclean, 2014). The word agility is preferred in comparison to flexibility as agility portrays the idea of intentional and proactive stance.

Adaptability and change

Adaptability is linked to change. The concept of adaptability is currently an emerging field of study (Cocojar, 2008; Uhl-Bien & Arena, 2017). Fundamentally it is about being flexible when things change (Yukl & Mahsud, 2010). The word adaptive carries the idea of the ability to change to be relevant or suitable at the necessary working level (Petrie, 2014). Adaptive suggest the ability to adjust one's leadership and organization to suit the changing environment to compete. Other similar words include versatile, flexible, adaptable, and agile (Yukl & Mahsud, 2010). Adaptability and change are central to the other leadership competencies and organizational development. The paradigm of adaptability and change is significant at the personal as well as the organizational level (Bennett & Lemoine, 2014; Bin Taher, Krotov, & Silva, 2015). Adaptability is described as a competitive advantage for leadership and the organization.

Relationship and collaboration

Relationship and collaboration are related. Collaboration simply means to work together. The paradigm of relationship and collaboration is synonymous with other terms such as shared, inclusive, distributed, participatory, collective, cooperative, and relational (Allen et al., 1999). It is about relational leadership that focuses on the common ground to work together (Cameron & Green, 2012). Researchers have argued that the collaborative leadership is preferred in comparison to the hierarchical leadership approaches (Ibarra & Hensen, 2011; Pisapia, 2009; Tucker & Lam, 2014). The collaborative leadership is classified as one of the transnational competencies that establish strategic relationships (Patterson, Dannhauser, & Stone, 2007). Other related terms include networking, communicating, coordination, and cooperation. Relationship and collaboration are considered as the leadership competencies most favoured in organizations (Black, 2015; Visagie et al., 2011). Additionally, relationship and collaboration are considered as the most suited for the modern organizations (James, 2011; Yammarino, 2013).

Methodology

This section discussed on the research design, selection of case and the participants, the case study in-depth interview, instrument, and data analysis. The methodology involves the process of the research. The methodology of this study is based on the interpretative paradigm of qualitative case study. There is a lacked empirical study in the emerging leadership study in the higher education institutions. The choice of the methodology is to facilitate answering the question of the study. As such the qualitative case study is appropriate to develop an in-depth understanding of the topic on the 21st-century emerging leadership competencies in the selected Malaysian higher learning institution.

Research design

A research design guides the conduct of the study. This study employed the *qualitative case study*. The qualitative approach is able to provide the context rich data suitable for the study on leadership competencies (Arvey et al., 2015). The qualitative paradigm is suitable for leadership studies due to the multi-discipline nature of the field (Arvey, et al., 2015). It is also suitable for the emergent forms of leadership (Bryman, 2004). The qualitative case study explores the contemporary case in its real-world context in-depth (Takahashi, Ishikawa, & Kanai, 2012; Yin, 2009). Most importantly, the research design supports the topic and research question (Neuman, 2006). Hence, the qualitative case study is the appropriate research design.

Selection of the site and participants

Cases were chosen for research because they would fulfill the purpose of the study. A case can refer to an individual, a group of people, an organization, a community or an era (Cepeda & Martin, 2005; Yin, 2009). The guidelines criteria for the choice of the site and participants includes the organization that has a board of directors and management team that can best offer the leadership insights on the study topic. Therefore, the choice of the case for this study is a selected higher learning institution that has a board of directors and management team. The choice of the university is because it has excelled in performance as an educational institution since its inception in 1931. The university's progress and achievements reflected the organization's visionary and capable leadership. University Putra Malaysia (UPM) which was in the Klang valley, Malaysia, is one of the premier universities as well as one of the research universities in the country among other accomplishments.

Furthermore, UPM has evolved into a premiere institution that has excelled in its rankings and won awards. More importantly the researcher is well supported for the cause of research and data collection.

The purposeful sampling technique was used to select the participants for data collection. Purposeful sampling involves choosing the site and participant that can best help the study. The sampling consisted of twelve (12) participants including two (2) former top leaders comprising of nine (9) males and three (3) females. All the participants have long years of leadership experiences ranging from fourteen (14) years to thirty-seven (37) years.

Case study in-depth interview

The case study used the various means of data collection. The sources of data collection were in-depth interviews, observations, information from the participant's profiles, and documents or related publications. However, the main source of data collection was the face to face in-depth interview with the participants (Megheirkouni, 2017; Plano-Clark & Cresswell, 2015). The consent letter was sent to the university main administrative office for the approval of data collection. The researcher periodically followed-up with the respective participants for the confirmation of data collection. Upon receiving the confirmation to proceed, a list of the proposed participants was scheduled, and arrangement made for the interview sessions. The twelve interviews sessions were followed up by a second brief clarification meeting of about fifteen minutes and the member check of the interview transcripts via emails. All interviews were conducted at the respective participant's offices that lasted about forty-five (45) minutes to one (1) hour fifteen (15) minutes. In qualitative study, the researcher is the research instrument. In preparing for the study, the researcher was prepared in terms of taking the courses in basic and advance qualitative classes to be familiar and be prepared as a qualitative researcher.

Pilot study

A pilot study was conducted to improve the data collection process and the interview protocol. It is also an opportunity to conduct the process of interview before the actual research. An interview protocol was prepared which served as a guide to the data collection process. An interview questions with probing questions were also prepared. The plans for data collection together with the interview protocol, and interview questions were reviewed by the committee of the study project for accuracy. The pilot study was conducted by the researcher with a university leader to test and refine the interview questions. The check and balance process facilitate the rigor of the data collection process. The flexibility of the qualitative research approach allows the researcher to refine the research process accordingly.

Data analysis

The qualitative data analysis is about making sense of the data and condensing it into emerging themes (Merriam & Tisdell, 2016). The overview of the processing of data involves data collection, data processing, and data analysis. The data analysis of the study was analyzed manually. The data analysis process included the steps of preparation, exploration, coding, categorizing, and developing themes (Plano-Clark & Cresswell, 2015). In preparing the data, the interviews were transcribed verbatim and reviewed for accuracy. The transcripts were sent back to the participants for *member check* as was agreed upon. During the exploration stage, the researcher was immersed in the interview transcripts including critical reflection, highlight key ideas, and quotations in the data sheet. Coding is the process of labelling and interpreting the meaning accordingly (Miles, Huberman, & Saldana, 2014). Categorizing is about assigning the codes to groups or family codes including constant comparison. Themes are patterns that emerged which are link to the research questions. This study used the thematic analysis of *layering and interconnecting* (Plano-Clark & Cresswell, 2015). There were multiple strategies used to validate the findings. The criteria employed to guide the trustworthiness of the results were credibility, dependability, peer review of interview protocol and data analysis, members checking of interview transcripts, triangulation, and audit trial (Merriam & Tisdell, 2016). Through the data analysis procedures, the data were reduced and condensed into emerging themes which were the findings of the study.

Findings and discussions

Based on the results of the findings there were two main themes that emerged followed by the related sub-themes. The two main themes are the leadership competency concept and the emerging leadership competencies (Table 1). Under the theme of leadership competency concept were the subthemes of competency relevant, future leaders need competencies, and core competencies necessary. Within the theme of emerging leadership competencies are the subthemes of corporate leadership, visioning and strategic thinking, leadership agility, adaptability and change, relationship and collaboration, and cross-cultural competence (Table 1).

Table 1: Findings of the Study

Themes	**Leadership competency concept**	**Emerging leadership competencies**
Sub-themes	• Competency concept relevant • Future leaders need competencies • Core competencies necessary	• Corporate leadership • Visioning and strategic thinking • Leadership agility • Adaptability and change • Relationship and collaboration • Cross-cultural competence

Source: Authors' compilation

Leadership competency theory

This section discussed on the main theme of the leadership competency concept and the emerging leadership competencies with the related sub-themes.

Competency concept relevance

All the participants concurred that the competency concept is relevant in the higher learning institution context. One of the participants says that the competency concept is not only germane, but it is necessary.

A significant thought expressed was that if a person is appointed into a leadership role, he or she should find out the competencies required and develop accordingly so that they would be effective. The finding showed the flexibility and strength of the leadership competency concept.

Studies have indicated that competencies formed the basis for effective leadership performance (Sengupta, Venkatesh, & K. Sinha, 2013; Vizirani, 2010; Young & Dulewiez, 2009). The competency concept is expected to emerge as the viable option for leadership practice in the 21st-century knowledge-based organizations (De Beer & Hondeghem, 2009; Mumford, Zaccaro, Connely, Marks, 2000; Northouse, 2013; Szeto et al., 2015). The Malaysian Ministry of Higher Education has highlighted and described the similar leadership competencies in its related publications or guide book (UniTP, Orange Book, 2016).

Future leaders need competencies

Half of the participants interviewed indicated that modern and future leaders required some key leadership competencies for effective leadership. One of the factors for this view is the changing education and leadership landscape (Pisapia, 2009; Visagie et al., 2011; UniTP, Orange Book, 2016). Due to this development, new leadership capabilities are needed (Bennett & Lemoine, 2014; O'Connell, 2014; Van Wart, 2013). Leadership competencies enhance the capability of the individual. The globalized organizational environment coupled with the many challenges faced in the higher education sector requires a multi-facet approach to leadership (Pisapia, 2009; O'Connell, 2014). Future or potential leaders are urged to *identify* and *nurture* the related leadership competencies for effective leadership (UniTP, Orange Book, 2016).

Necessary core competencies

In every profession there are cores or baseline competencies expected of the person. In the context of the higher learning institutions, the academicians are also not exempted as well (UniTP, Orange Book, 2016). Considering this study, the core competencies are necessary. There is a need to differentiate the core competencies in one's job and the expected leadership competencies for leaders. In the setting of higher education, the core competencies of the academicians are teaching, supervision, research, and administrative services. Academicians are expected to excel as academic leaders. However, the individual can develop the leadership competencies accordingly in their personal growth and leadership journey.

Emerging leadership competencies

This section discusses on the emerging leadership competencies. The emerging leadership competencies are corporate leadership, visioning and strategic thinking, leadership agility, adaptability and change, and relationship and collaboration. The findings from the participants concurred with these emerging leadership competencies. Corporate leadership and cross-cultural competence emerged from the field data as *new findings* in this study.

Corporate leadership

The sub-theme on corporate leadership emerged as a significant leadership competency in the selected public university setting. The findings of corporate leadership were an unexpected and important finding in this study. The majority of the participants discussed on this sub-theme of corporate leadership. This new finding of corporate leadership is significant. As the term suggest, corporate leadership refers to the institutional identity perspectives of approaching leadership at the higher educations (Chinta et al., 2016; Middlehurst et al., 2009). Corporate leadership essentially involves the top leaders planning activities of the strategies, direction, and operation of the organization. Many educational institutions worldwide have grown into substantial large organizations. Therefore, the business-like approach requires the corporate identity framework of leadership and management (Mohd, Abu Bakar, Ismail, Halim, & Bidin, 2016; Pang, 2013). The university is led as a business entity or corporation (Pang, 2013).

Some of the contributing factors for the emergence of the competency of corporate leadership include the status of financial sustainability and ensuring the competitiveness of the institution. There are various subsets or skills relating to the various areas of designation and responsibilities within the corporate leadership. Some of the skill sets discussed in the findings included generating income, financial management, manage human resource, develop branding, develop ranking, raise research grant, business mind-set, and manage risk.

Visioning and strategic thinking

The competency of visioning and strategic thinking is viewed as an important leadership competency. Visioning and strategic thinking are necessary activities for the planning and future direction of an organization (Goldman & Scott, 2016; Pang & Pisapia, 2012; Vecchiato, 2014). This competency has also generated a lot of interest and discussion among the participants. Most of the participants have explicitly talked about the significance of the competency of visioning and strategic thinking, though there were variations of perspectives in terms of their descriptions. One of the participants linked this competency of visioning and strategic thinking to strategic leadership. According to a participant interviewed, in leadership, visioning is more important than strategic thinking because strategies can come from the leadership team members. Another participant stressed that the competency of visioning and strategic thinking is a must for leaders. While another added perspective is that it is vital for leaders to have vision and a strategic mind.

Leadership agility

There was agreement from the participants that the emerging competency of leadership agility is relevant. One of the participants who is a key leader indicated that the competency of agility as very important. The participant viewed the competency of leadership agility should be inherent in leaders as well as cultivated in combination with other leadership competencies. The understanding of the competency is essentially about being flexible and adaptable (Sherehiy et al., 2007). Another participant stressed that leaders need to have the leadership agility mindset to explore and find solutions to problems (Pisapia, 2009).

Adaptability and change

The competency of adaptability and change is central to other leadership competencies and leadership (Petrie, 2014; Uhl-Bien & Arena, 2017). This competency essentially is about adapting to new development and the willingness to change (Yukl & Mahsud, 2010). The paradigm of adaptability and change is applicable at the various organizational levels or even the organization itself. Generally, the participants understand the current changing globalized environment of the organizational context. Thus, leaders need to adapt to new things and change. People tend to be complacent in the normal environment and resist change.

An interesting thought that were raised by a participant stressing the paradigm of change is not only applicable at the individual leadership level but at the management level as well. Due to the tenured based leadership where, top leaders come and go the leadership team needs to be adaptable. According to the participant, the paradigm of adaptability and change is particularly necessary at the middle management team.

Relationship and collaboration

The paradigm of relationship and collaboration is people centric. It is about working together to achieve a common purpose and outcome. The other common terms used are shared, collective, and distributive. Studies have shown that the competency of relationship and collaboration is preferred in most organizations (Black, 2015; Middlehurst, 2012). A participant acknowledged that dynamic leadership do change and evolve. The exercise of the emerging leadership competency would reflect the overall progress of an organization. One of the hallmarks of the collaborative leadership is that it engages with others for their perspectives to achieve the greater good (Rubin, 2009). Collaborative leaders work in partnership with the team to fulfill the goal of the organization.

Cross-cultural competence

Culture and leadership have emerged as vital in recent years (Bartel-Radic & Giannelloni, 2017; Chow et al., 2017b; Middlehurst, 2012; Yammarino, 2013). The idea of cross-culture competence fundamentally involves the interaction between two or more cultures or countries. Findings that emerged from data showed that the concept of being competent cross-culturally is significant. Cross-cultural competence is relevant in the higher learning institution environment with its diverse international student's population (Brooks & Jean-Marie, 2015; Middlehurst, 2012). Furthermore, the cross-cultural competence essentially underpins the other emerging leadership competencies in leadership practice.

In the context of an international university like the selected higher learning institution and the multi-cultural society like Malaysia, it is imperative that a leader is knowledgeable and competent cross-culturally. One of the participants describes cross-cultural competence as possessing the international perspective and the ability to understand and lead in terms of thoughts and action. Another participant said that cross-cultural leadership is one of the popular subjects discussed in many organization's managements. Also, a participant highlighted that leaders cannot be ignorant of other cultures. At the same time, leaders are not to take people from other cultures for granted. A participant stressed that the issue of cross-cultural competence need to be address appropriately.

The link between the attributes of institutional leader, dimensions of transformational leadership, and the emerging leadership competencies

This study also showed the link between the attributes of the expected excellent institutional leader highlighted by the Ministry of Higher Education to the dimensions of transformational leadership, and the emerging leadership competencies (MEB 2015-2025 (HE) 2015; UniTP Orange Book, 2016) (Table 2). The MEB 2015-2025 (HE) 2015 have implicitly highlighted transformational leadership about the highlighted leadership paradigm for the Malaysian higher learning institution leaders. At the same time the UniTP Orange Book, 2016 also listed the expected leadership attributes of the institutional leaders. Hence, this study shows the link between the attributes of institutional leader, to the dimensions of transformational leadership, and the emerging leadership competencies.

Table 2: Link between the Attributes of Institutional Leader, Dimensions of Transformational Leadership, and the Emerging Leadership Competencies

Highlights of Attributes of Institutional Leader (MOHE) (MEB 2015-2025 (HE) 2015; UniTP, Orange Book, 2016)	**Dimensions of Transformational Leadership** (Bass & Avolio, 1994; Pawar, 2016; Wahab et al., 2016)	**Emerging Leadership Competencies** (Chow, T.W., 2018)
1) Demonstrate excellence in institutional leadership	i) Inspirational motivation	• Visioning and strategic thinking • Leadership agility
	ii) Intellectual stimulation	• Corporate leadership • Adaptability and change

Highlights of Attributes of Institutional Leader (MOHE) (MEB 2015-2025 (HE) 2015; UniTP, Orange Book, 2016)	**Dimensions of Transformational Leadership** (Bass & Avolio, 1994; Pawar, 2016; Wahab et al., 2016)	**Emerging Leadership Competencies** (Chow, T.W., 2018)
2) Demonstrate good leadership attributes, sustain best practices, and lead change	iii) Idealized influence	• Visioning and strategic thinking • Cross-cultural competence
	ii) Intellectual stimulation	• Corporate leadership • Leadership agility
3) Recognized figure at national and international level	iii) Idealized influence	• Leadership agility • Cross-cultural competence
4) Demonstrate understanding of key aspects of management/leadership	i) Intellectual stimulation	• Corporate leadership • Leadership agility
	ii) Individualized consideration	• Relationship and collaboration • Adaptability and change
5) Visionary and strategic mindset	i) Inspirational motivation	• Visioning and strategic thinking

Source: Authors' compilation

Conclusion, implications, and recommendations

In answering the research question, six (6) emerging leadership competencies were discussed including the emergence of the leadership competency of corporate leadership and cross-cultural competence from the field data. The table 3 showed the results of the findings and contributions in addressing the research question.

The study contributed in the areas of theory, practice, context, methodology, and policy. The contribution in terms of theory is the emerging leadership competencies in the selected Malaysian higher learning institution context. The contribution for practice is the key emerging leadership competencies as highlighted: corporate leadership, visioning and strategic thinking, leadership agility, adaptability and change, relationship and collaboration, cross-cultural competence. As for context it is the theme that transcends culture. In the methodological contribution the qualitative case study provided the context-rich data for this study. The recommendations for practice are applicable at three (3) levels. At the Ministry of Education level, the policy decision makers can promote the leadership competency concept and the emerging leadership competencies. At the institutional level, the leadership or management need to explicitly state the relevance of the leadership competency concept for leadership development and practice. At the leader's level, it would be appropriate for the individuals to identify and develop the key emerging leadership competencies for development and practice.

Table 3: Findings to the research question

Contri-butions	Theory	Practice	Context	Methodo-logy	Policy
	The emerging leadership competencies in the Malaysian higher learning institution context.	Corporate leadership, visioning and strategic thinking, leadership agility, adaptability and change, relationship and collaboration, cross-cultural competence.	Leadership that transcends culture.	The qualitative case study provided the in-depth detailed and context-rich data for the research.	Promote the leadership competency concept and the key emerging leadership competencies.

Source: Authors' compilation

These findings are *original* contributions to knowledge based on this research. The findings extend the knowledge as raised in the research questions. The study also adds to the work of other researchers in the field of leadership. This study focused on one Malaysian higher learning institution. However, it fulfilled the purpose of an in-depth context-rich research. There are two (2) areas where further studies can be conducted. The two (2) areas are the emerging leadership competencies construct in the other Malaysian higher learning institutions and the leadership competency concept in the other organizational sectors. In conclusion it is important to know the right concept of leadership in tandem with the times as the key to strategic advantage for *progressive* leadership development and practice.

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FROM EXPERIENCE TO INFLUENCE: POSITIVE CONTRIBUTION OF ELECTRONIC WORD-OF-MOUTH (EWOM) TOWARDS DERMAGS PRODUCT

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ABSTRACT. Purpose: The purpose of this paper is to better understand the critical components of mobile viral marketing strategies. A conceptual model is proposed and empirically tested the grounded theory of social conditions, attitudinal conditions, personal conditions, consumption conditions and resource-based conditions influence consumers' intention involve in eWOM via social media. **Methodology:** A questionnaire survey was administered to 150 DERMAGs consumers. Regression analysis was used to analyze the data and test the hypotheses that alliance intention to viral and the grounded theory attributes. **Findings:** The postulated relationships were found supported by the data. The research found that personal conditions, consumption-based condition and resource-based conditions were positively influenced customers to share experience after consuming to others. **Practical Implication**: This research presents a conceptually yet empirically supported framework to describe the relationship between three factors of grounded theory and sharing intention. The study is particularly useful for beauty companies to further their effort on brand awareness and increase the advertisement and promotion in order to alleviate the product recognition. **Social Implication:** This paper gives valuable reference to marketers of the beauty companies to engage in social media, increase the promotional strategies, focuses on the customer relationship and strengthen customers confident on the product by educating them.

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Introduction

As we can see, nowadays social media like Twitter and Facebook, WhatsApp, YouTube, Instagram and Blogs had affect massive changes along with internet popularity and rapid dissemination of word-of.mouth (WOM). Hence, according to Mitchell and Page (2014), the fact that online news dispersion and using are recently consist of social media. In addition, this is it is to be said that one of the effective marketing tools to swiftly transfer information is electronic word-of-mouth (eWOM) as when the average consumer only need a single click on share button provided on sites such as, retweet, repost in Facebook and Twitter. The message usually is giving high experiences and effects to the other consumer as it is provided in direct experiences Park *et al*., (2007).

Moreover, Wu (2013) stated that it would bring a superior opportunity when an experienced customer provides a good review and comment on online sites. Therefore, this style of communicating is highly valued to customers and it is often considered one of the most reliable sources of information. Bickart and Schindler (2001) claimed that generated information by marketer such as advertisement is considering as less effective compare to sources of information coming from WOM or eWOM that usually have better credibility because it was a reviews based on personal experiences. Moreover, in this context, as the consumer themselves are willingly to share their experiences so it become an influences to others in decision making process is the most crucial information sources. According to Litvin, Goldsmith and Pan (2008), the shared information would give some interpersonal influences and it might consider as a positive contributions of electronic word-of-mouth (eWOM) to the specific product.

Literature Review

The one that enable sharing is the framework of communities' participation, it is not only the web features because it is consist of technical implementations (Jenkins, 2009). As the web is enabling and allowing people exchange and create content even though social media and social networking have some similarities as it functions is the medium platform to people interact with each other online. Hartborn (2010) identified that there are still some of contrastive that can be seen as social media more to sharing of information with numerous numbers of people where there would have same opportunity to build relationship due to same interest.

As one of the proven effective tools in marketing industry, social media is enabling a person to communicate with multiple even hundreds or thousands of other people. Therefore, many companies have been using this platform in order to market their product and services worldwide Pura such as the YouTube providing more to attractive video, Facebook promoting with good copywriting and Twitter (Pura, 2013). Sometimes, this platform is even giving advantages to companies to reach even millions of views in small amount of time, indirectly its making the companies become well-known. Furthermore, consumer also getting a better information and understanding when this platform assisting in describing the product. In previous study, Blackshaw and Nazzaro (2004) stated that this form of media assists in describing which creating and initiated with intention to educate consumer on certain product or issues.

Henning-Thurau *et al*., (2004) stated, eWOM as the communication that consist of positive and negative statement about certain product, services or issues made by customer themselves through internet. There are a few explanations according to Kurucz, (2008), one is any type of marketing that broadcast by encouraging people to voluntarily forward the messages as it is relatively new concept. Typically, this is a new concept of electronic word-of-mouth for commercial function in concurrence with the growth of internet within this century. Moreover, if it were used properly in a way, there would be a massive effect as marketing tool for companies' communication according to Dufour (2011). The fact that the convenience of internet is making user feel comfortable to expand their opinions and it is by the way low cost with swift delivery. Hence, people nowadays positively tend to used social media as it is the fastest platform to connect to the social communities. The convenience of internet make user comfortable to spread their opinions and it is lower cost with fast delivery. According to Kurucz 2008), there are a few explanations of viral marketing as if is relatively new concept. One of the definitions is any type of marketing that broadcast itself by encouraging people to voluntarily pass the messages. Hence, people nowadays positively tend to used social media as it is the fastest platform to connect to the social communities. Facebook, Instagram, Twitter, YouTube, WhatsApp and Blog are among the social media used nowadays as platform of people interact with other, sharing thought, photos and their activity feeds, Palmer & Koenig-Lewis (2009).

Factors of Sharing Intention

Around 3.5 billion e-mail messages across the internet daily according to Hamm *et al*., (1999). Thus, other than using social network as their platform to share people are still engaging through email. Hence, as consumer take internet as a one of the major communication tool and platform to get information, they become considerate into what kind of benefit would be given to their social communities with this action. As stated, social conditions can be defined as the determinants of one's intentions into sharing information to public but still considering who is the recipients and their anticipated response to the recommendation in future.

Audience's interest and motivation to use the content would be attracting when a persuasive, interesting messages were attached to them so then, they will pass it on to others. Haghirian *et al*., (2005) claimed that consumer only interested in receiving the messages which are relevant and related to them. Muzaffar and Kamran (2011) stated that quality of the given information needs to be more focused before it was delivered to the consumer. This because the fact that beliefs, feelings and intentions are not prevented distinctions between them that may interact in a different way in determining behaviour. Quality became the motivations for consumer that encourage their attitude and action tendencies to share a messages as the favourable information which is convenience and enjoyable.

Then, personal conditions are defined as personal context of the communicator like market consumer expertise and generosity of consumer that influence their intention to share information in social media. The phenomenon of electronic word-of-mouth (eWOM) which are using a different profile that designed to identify possible individual that may influence people to buy the product and services. Hence, Rodriguez *et al*., (2014) stated that presented substantial review of the interactive marketing literature specific to personal selling and sales management, offering a range of possible opportunities, such as technological platforms, sequence message and communication various platforms including mobile synchronization.

Consumptions-based conditions consist of customer satisfaction and communication involvement in consumer sharing intention as according to Oliver (1997), satisfaction of customer defined as a pleasurable level, related to their consumption. Customer must first feel satisfied with the consumption of product, only then they will proceed to speak out their word as recommendations. As a critical role in WOM (word-of-mouth) behavior, satisfaction act to affects their motivations to give comment. The positive the WOM (word-of-mouth) also may be the reason of increasing in consumer’s expectation and it will cause higher in customer satisfaction which it derives to higher intention to share among them. Moreover, some are considering WOM as an explanatory variable, including how WOM affects the expectations of customers Zeithaml *et al*., (1985) and Chen *et al*., (2012). Next, the resource-based conditions which involved the credibility of a resources and it becomes the determinant of consumer’s intention to share the content. Previous research specified, that realizing an advertisement credibility are the first produce that were tested and were founded to influence the consumer’s attitudes towards the advertising (MacKenzie and Lutz, 1989). As Brackett and Carr (2001) said that reliability and credibility of the sources was confirmed to be the overall valuable value toward marketing. Moreover, consumer consideration towards the content is consider as their expression of expectation regarding the quality of a product or services will produce.

Overall, this study was conducted based on some previous related studies to meet the research objectives and result with relevant hypothesis. As Mind Comet (2006) stated that success of information sharing is contingent on consumer's active participation towards other themselves. Based on literature review, this study is proposing that social condition, attitudinal condition, personal condition, consumption-based condition and resource-based condition are the factors that could influence consumers. The framework is illustrated in the Figure 1.

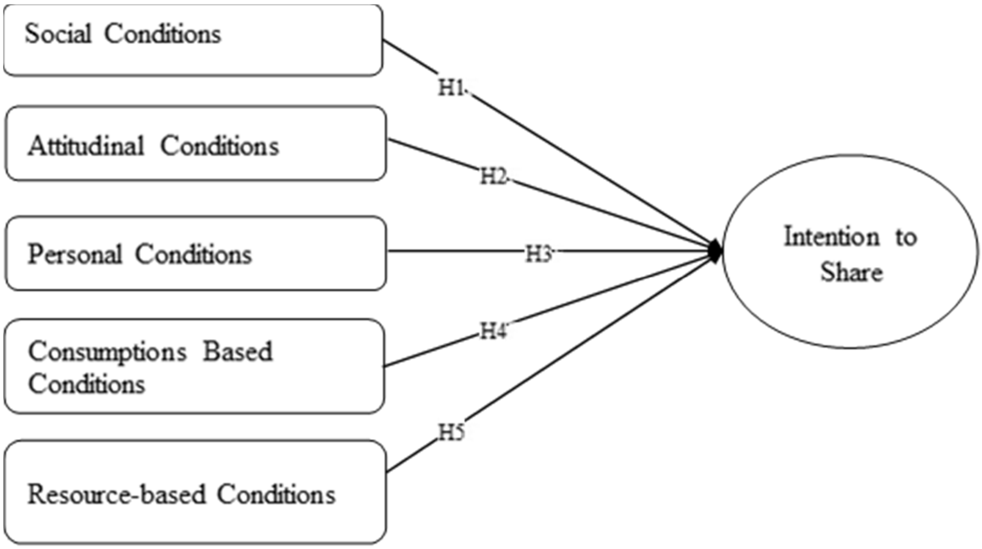

Figure 1: Conceptual Framework and Hypothesis

Source: Authors' compilation

Methodology

Convenience sampling technique has been used for this study. The survey was conducted using online form via Google form. The population of this research is determined to be Dermags beauty product consumers which who have an experience consuming the products. Hence, even though the products are originated from Johor Bahru, some of the consumers comes from a few other places. Thus, this make the total populations is considered as unknown.

This is quantitative design study and descriptive by approach using a survey questionnaire and the primary data were obtained from information provided by respondents in the questionnaire. Questionnaire for this study will be answered by beauty product (Dermags) consumers and they were given a link of online questionnaire through several social networking sites as well as the printed version. A total of 150 sample size of the students was chosen according to Tabachnick and Fidell (2007), the questionnaire designed for this study was close-ended questionnaire with two kinds of variables which is independent variables and dependent variables. The first section consists of respondent profiles and used 5-PPoint Likert Scale evaluation: *1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree* for the second section. Overall, the data investigated in this study were analyzed by using Statistical Package for Social Science (SPSS) version 18.0.

Findings

This section discusses the result of the analysis from the collected data in online form. The analysis is using Statistical Package for Social Science Software (SPSS) and were analyzed descriptively on respondent profiles of the respondents such as age, gender, income and education level. Moreover, researcher also discusses on the frequency of going online, type of frequent used social media among consumers.

Table 1: Respondent Profiles

Demographic	Groups	Frequency	Percentage (%)
Gender	Female	135	90
Age	22 - 32 years old	57	38
Education Level	Bachelor Degree	70	46.7
Monthly Income	RM2001 - RM3000	58	38.7
Online Average	More than once a day	81	54

Source: Authors' compilation

As illustrated in Table 1, respondent sexual categories are dominated by female which represented 90% of the respondent and most of the respondent dominated by the group of 22 - 32 years old with 38%. A big group of the respondent were from bachelor degree of education level with 46.7%. As for the respondent monthly income, most of the respondent came with RM2001 - RM3000 cumulative income range by 38.7%. As for the online period average, respondent was categorized at more than once a day with dominant percentage of 54%.

Table 2: Result of Frequent Social Media Used

Social Media used	Frequency	Percentage	Frequency	Percentage
	Yes		No	
WhatsApp	126	90%	24	10%
Instagram	94	62.7%	56	32.7%
Twitter	45	30%	105	70%
Facebook	138	76.7%	12	23.3%
YouTube	35	23.3%	115	76.7%
Blog	48	32%	102	68%

Source: Authors' compilation

Table 2 illustrates the frequent social media used by respondent towards their sharing intention. Most of the respondent saying Yes to WhatsApp with the highest percentage score 90% compare to Facebook 76%, Instagram 62.7%, Blog 32%, Twitter 30% and only 23.3% choose YouTube. Researcher understood that, most of the consumer choose WhatsApp might be because of Dermags as a product that are not really known to and they prefer to share to experience only with their close related contact first, then they may use other social network sites.

Reliability and Validity Analysis

According to Toke *et al*., (2012). Reliability analysis were interpreted as to which step to extent the survey form or questionnaire presented the similar result in a frequent time. Hence, this section shows the reliability analysis conducted on three independent variables which were social condition, attitudinal condition, personal condition, consumption-based condition and resource-based condition relationship. Moreover, also taken into account is the dependent variable such as consumer's intention to share positive electronic word-of-mouth (eWOM) in social media. As Julie Pallant (2007) stated that, a good indicator for reliability is based on the value of Cronbach's alpha when it is more than 0.6 it is considered acceptable and value above 0.8 is preferable. Toke *et al.*, (2012), reliability is used to interpret as to which extent the questionnaire constructed have the similar result in a frequent time. The value for all independent variables was 0.900, 0.907, 0.920, 0.879 and 0.922 respectively, while dependent variables were 0.935. This suggests that the variables are acceptable and reliable in this study.

The KMO dimensions result for this study is 0.946, which is higher than recommended minimum value 0.6 Kaiser (1974) and Bartlett's Test of Sphericity Bartlett (1954) where it is significant at .000, supporting the factorability of the correlation matrix. All items that were utilized as part of the value exceed the indicator suggested by Kaiser (1974) which is 0.6 or greater & Bartlett's (1954) $p<.05$. Hence, indicates that the data from questionnaires are valid and acceptable to perform further analysis.

Table 3: Reliability and Validity Analysis

Variables	**No of item**	**Items Deleted**	**Reliability Analysis Cronbach's α**	**Validity Analysis KMO and Bartlett's Test**
Social Condition	5	-	0.900	
Attitudinal Condition	5	-	0.907	
Personal Condition	5	-	0.920	KMO = .946
Consumption-based Condition	5	-	0.879	Sig. = .000
Resource-based Condition	5	-	0.922	
Intention to share	5	-	0.935	

**KMO value: 0.6 and above Kaiser (1974) & Bartlett (1954)
**Reliable value: 0.6 and above Julie Pallant (2007)
Source: Authors' compilation

Multicollinearity Analysis

Multicollinearity defined a situation where number of independent variables in multiple regression model are closely related to one another Investopedia (2016). The standard tolerance value must less than 0.1 and variance inflation factors (VIF) below than 10 to have no problem with the variables according to Brenson, Levine, Krehbiel & Stephen (2012). Table 4 show that there is no multicollinearity issue arise in this research because all the variable tolerance value and VIF value is in between the standard value.

Table 4: Multicollinearity Analysis

Variables	Collinearity Statistics	
	Tolerance	**VIF**
Social Condition	.414	2.413
Attitudinal Condition	.387	2.581
Personal Condition	.249	4.020
Consumption-based Condition	.211	4.745
Resource-based Condition	.322	3.108

Source: Authors' compilation

Objective Achievement

The objective of conducting Regression Analysis is to measure the relationship between one dependent variable and several independent variables (Pearson's, 1908). Furthermore, the best predictor among independent variables also can be seen using regression analysis, which the study can conclude what factors that led consumer intention to share information (electronic word-of-mouth) in social media. Therefore, Multiple Regression is used to investigate the objective and hypothesis in this study. The two variables investigated in this study were Independent Variables which consisted of social condition, attitudinal condition, personal condition, consumption-based condition and resource-based condition relationship and Dependent variables consumer's intention to share positive electronic word-of-mouth (eWOM) in social media.

As according to Malhotra & Peterson (2006), to determine the relationship between the independent factors with a single dependent factor, regression must be used. Significant value of the overall regression equation as well as specific partial regression coefficients must lower than 0.05, to tell that their positive relationship it is supported. Other than that, the analysis also had looked into the beta coefficient value and the largest value was the most influential variable for this group according to Julie Pallant (2007).

As shown in Table 5, the result of adjusted R_2 for this model is 0.789 which mean 78.9% of the variance had been significantly explained by the independent variable. Furthermore, from the analysis result, there are three variables that founded to be statistically significant which the highest is resource-based conditions ($\beta = 0.449$, $p < 0.05$), second is ($\beta = 0.332$, $p < 0.05$), and last is consumption-based conditions ($\beta = 0.175$, $p < 0.05$). The result shows a positive relationship when p-values was less than 0.05. However, social conditions and attitudinal conditions demonstrates no significant positive relationship with sharing intention where ($p > 0.05$). The hypotheses supported from the result of analysis are as follow.

Table 5: Multiple Regression Analysis

Coefficients[a]						
Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Adjusted R_2
	B	Std. Error	Beta			
(Constant)	.054	.161		.336	.738	
Social Condition	.029	.064	.035	.615	.539	.789
Attitudinal Condition	.031	.064	.037	.634	.527	(78.9%)
Personal Condition	.358	.078	.332	4.595	.000	
Consumption-based Condition	.195	.087	.175	2.234	.027	
Resource-based Condition	.469	.068	.449	6.891	.000	

Dependent: Intention to share
**Significant value: p<0.05 Malhotra & Peterson (2006)
Source: Authors' compilation

Objectives 1: To examine relationship between social conditions and consumer intention to share experiences on social media after consuming Dermags beauty product.

As shown in Table 5, shows that social conditions have negative results which the relationship with consumers sharing intention in social media which means there is no positive significant relationship. This is actually backup by H1, where there is no relationship between social conditions with consumer intention to share experiences on social media as it is not supported by the significant value from the analysis result. It can be proving by the result shows that p-value is 0.539 which is $p>0.05$ and $\beta = 0.035$, where it is not acceptable. Therefore, can be concluded that consumers were not influence by social conditions on having intention to share their experiences after consuming Dermags product into social media. This result is inconsistent with Chen *et al*., (2011) stated that with the rise in social networks, a new era of content creation has emerged, where individuals can easily share experiences and information with other users. However, even though it sounded like it would influence consumers. This may because the product has low brand awareness, so consumer would think twice if there are going to share about Dermags product. Even though they are experiencing the product itself, consumers still considering what would the sharing effect their social engagement with other social communities. As been stated by Keller (2003), claims that brand awareness consists of recognition and recall and that brand awareness in its turn is a part of a brand knowledge, it is important to know where most of the consumer decisions are made.

H1: There is no relationship between social conditions and consumer intention to share experiences on social media.

Objectives 2: To examine relationship between attitudinal conditions and consumer intention to share experiences on social media after consuming Dermags beauty product.

Result shows that attitudinal conditions have negative results which the relationship with consumers sharing intention in social media which means there is no positive significant relationship. This is actually backup by H2, where there is no relationship between attitudinal conditions with consumer intention to share experiences on social media as it is not supported by the significant value from the analysis result. It can be prove by the result shows that p-value is 0.527 which is $p>0.05$ and $\beta = 0.037$, where it is not acceptable. Therefore, can be conclude that consumers were not influence by attitudinal conditions on having intention to share their experiences after consuming Dermags product into social media. This result is inconsistent with Weidemenn (2007), attitude consist of concept of reward as extrinsic motivation that is based on tangible or intangible compensation, praise or sign of appreciation of the recommendation. However, in this study the result shows that consumer is not influence by attitudinal conditions as factor that could motivate them to perform experiences sharing in social media. This may because of Dermags engagement with their product consumer is low especially in social media, there are not offering reward and appreciation as per their participation in sharing the experiences after using the product. Meanwhile this would be a good investment because this will encourage them to give positive contribution to electronic word-of-mouth (eWOM) which travel rapidly todays.

H2: There is a no relationship between attitudinal conditions and consumer intention to share experiences on social media.

Objectives 3: To examine relationship between personal conditions and consumer intention to share experiences on social media after consuming Dermags beauty product.

The result for the relationship between personal conditions with consumer sharing intention is positively supported. This is actually backup by H3, where there is a relationship between personal conditions with consumer intention to share experiences on social media as it is supported by the significant value from the analysis result. It can be prove by the result shows that p-value is 0.000 which is $p<0.05$ and $\beta = 0.332$, where it is acceptable. Therefore, consumers were influence by personal condition on having intention to share their experiences after consuming Dermags product into social media. As per result, this is consistent with Hennig-Thurau (2004), stated that a group referred as true altruist, as they appear to be both strongly motivated by helping other consumers and companies. Therefore, in this study, it is true there is relationship between personal conditions and consumer intention to share their experiences after consuming Dermags product. This might because, majority of the consumer are women within age of 22 – 32 years old with good education level and income, it seems that this consumer are people who are matured and honest because they are not likely to have appreciation or reward to give good recommendations in sharing to others. They are generous consumer that have the intention to sharing their experiences as contribution to positive eWOM to Dermags. Their generosity are consider as their intention to benefits others as remark of internal value regardless of any motivational reinforcement Feick *et al*., (1995).

H3: There is a relationship between personal conditions and consumer intention to share experiences on social media.

Objectives 4: To examine relationship between consumption-based conditions and consumer intention to share experiences on social media after consuming Dermags beauty product.

The objective 4 in this study is accepted which mean there is relationship between consumption-based conditions with consumers intention to share their experiences on social media. This is actually backup by H4, where there is a relationship between consumption-based conditions with consumer intention to share experiences on social media as it is supported by the significant value from the analysis result. It can be prove by the result shows that p-value is 0.027 which is $p<0.05$ and $\beta = 0.175$, where it is acceptable. Therefore, consumers were influence by consumption-based condition on having intention to share their experiences after consuming Dermags product into social media. Consumption-based conditions consist of satisfaction, involvement and communicator. This is consistent with Oliver (1989) & Chen *et al*., (2008) stated that customer satisfaction plays a critical roles in studies of WOM behavior as it affects individual motivations to recommend product or services. Therefore, it can be concluded in this study that there is a relationship between consumption-based conditions and consumer intention to share, which it will contribute to positive electronic word-of-mouth (eWOM) of Dermags beauty product on social media. This may because as this product is a bit pricey compare to other product and the consumer expectation is high as well as their satisfaction.

H4: There is a relationship between consumption-based conditions and consumer intention to share experiences on social media.

Objective 5: To examine relationship between resource-based conditions and consumer intention to share experiences on social media after consuming Dermags beauty product.

As shown in Table 5, resource-based conditions have positive results which the relationship with consumers sharing intention in social media, where it means there is a significant relationship. This is actually backup by H5, where there is a relationship between resource-based conditions with consumer intention to share experiences on social media as it is supported by the significant value from the analysis result. It can be prove by the result shows that p-value is 0.000 which is $p<0.05$, where it is acceptable. Therefore, consumers were influence by resource-based condition on having intention to share their experiences after consuming Dermags product into social media. Hence, this is consistent with Palka *et al*., (2009), claimed that consumer are considering the content as their expression of expectation regarding the quality of a product or services will produced. Moreover, can be conclude that consumer will involve the resource credibility as a determinant of consumer's intention to share the content. They take consideration about the content and specific feature as their motivations to share.

H5: There is a relationship between resource-based conditions and consumer intention to share experiences on social media.

Objective 6: To identify the most influential factor influences consumer sharing intention into social media

Based on the Regression analysis result in Table 5, Furthermore, it can be proved that resource-based conditions is the most influential among three significant factors as the highest beta value, $\beta = 0.449$ and significant value of 0.000. This show more than half 78.9% of consumers were influenced on resource-based conditions towards their contribution of positive electronic word-of-mouth in social media platform. It can be conclude, as for Dermags, because it is a product from research based from

UTM, it seems that why consumer trust Dermags deliver good quality, this explain why resource-based condition resulted as the highest predictor and positively related to consumers intention to share their experiences in social media.

Conclusion

In a nutshell, the primary questions of this research is to identify is there any relationship between sharing intention toward social condition, attitudinal condition, personal conditions, consumption-based condition and resource-based condition. Based on the statistical findings, it was found that personal conditions, consumption-based condition and resource-based condition show positive relationship with intention to share experiences after consuming Dermag beauty product. Meanwhile, two of the factors which social condition and attitudinal condition show no relationship with sharing intention. Hence, not all of the questions were positively result, it shows that the product should imply further on brand awareness and increase advertisement, promotion in order to give product recognition.

Managerial Implications

Throughout this study, there are several important implications that can be improved by the company. The result reveal that personal conditions, consumption-based condition and resource-based condition are the criteria that effects sharing intention among consumers. In Dermags context, they are offering product with a bit premium price with high quality, they should pay attention the relationship with the customer who become their product consumer in order to enhance them to contingently would engage into the contribution of positive electronic word-of-mouth (eWOM) in social media. Consequentially this would be good move to enhance internet marketing for the product in the same time. Therefore, it is an undeniable fact that by knowing the consumers' attitude towards viral marketing, marketers can enhance their knowledge and sharing intention while practicing this marketing in their industry. In developing new products or new market, Dermags should increase their promotion on the brand in order to receive the best result that would impact consumer intention to share more about the product to their social communities. Because customer that maintain consuming the product although the product is quite expensive, they would be a loyal customer because they satisfied with the product.

Based on the finding and conclusion of the study, the following are the other several recommendations to be considered:

1. Dermags need to consider their social media engagement with consumer because consumer likely to have interests with business that possessed active social media engagement to increase consumer sharing intentions and participations.
2. Developer should increase marketing strategies like offering reward or conducting contest for consumer to enhance their attitude response which would led to positive electronic word-of mouth into Dermags.
3. Increase promotion, focused on customer relationship and increase brand awareness to nationwide.
4. Dermags could establish program to strengthen confident level by using the right beauty product to consumer or agent because this could increase their knowledge about Dermags product.

Recommendation and Future Work

There is some recommendation for future research that can be highlighted. In order to provide the impetus for future research to examining further the independent variables which is resource-based conditions would affect the most to the sharing intention after consuming for Dermags product. However, the other variables also should be notable especially the other two significant variables. Moreover, due to the limitation of time, only 150 sets of questionnaires were able to be collected. Therefore, for future studies, it is recommended to increase the sample size which is number of respondents in order to collect a more accurate and credible data. This will consequently increase the credibility of the research. The sample also can be categorized into specific age group, so that the opinions can be seen among all the age groups. In addition, the respondents' race is recommended to be added into the study. Furthermore, in next research, researcher may use other independent variables than the existing variables in this study such as perceived informativeness, ease-of-use, incentive and trustworthy.

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EFFECT OF CYNICISM TOWARDS ENVIRONMENTALLY RESPONSIBLE PURCHASE BEHAVIOUR OF ENERGY EFFICIENT VEHICLE AMONG MALAYSIAN CONSUMERS

MUHAMAD SYAKIR SHUKOR[1], ZURAIDAH SULAIMAN[2], THOO AI CHIN[3], ADAVIAH MAS'OD[4]

ABSTRACT. Objective: One of the toughest challenges in social marketing is behaviour intervention. Previous researchers have developed various models and theories to simultaneously examine behaviour changes and their effects**.** Due to resources scarcity and global warming, automakers have come out with an innovative idea of Energy Efficient Vehicle (EEV) which has been a great improvement in the automotive industry. This invention targets for behavioural change or behavioural adoption for consumers to adjust their preferences from a conventional vehicle to EEV. High market growth in the automotive industry has encouraged social marketers, policymakers, governments, and academics to propose suitable intervention approach in motivating preferences toward EEV. Using the context of the purchase intention of EEV in Malaysia, this conceptual research paper applies Environmental Responsible Behaviour (ERB) model to evaluate the causal model of materialism, environmental belief and environmental concern transcend on Purchase Intention of EEV. **Methodology:** This study proposed an explanatory quantitative method. Using a partial least squares approach, the measurement model for

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this study is presented. **Implication**: This research presents a conceptually supported framework to describe the moderating role of cynicism on the relationship between environmental concern with purchase intention of EEV due to rising issues of greenwashing in the automotive industry. The study is particularly useful by providing insights in assisting the stakeholders and automotive industry players on promoting the pro-behaviour toward EEV. This paper also provide additional review of Environmental Responsible Behaviour (ERB) model that been derived from Values, Belief and Norms theory (Stern et al., 1995).

Keywords: *Green marketing, environmental concern, green purchase intention, materialism, cynicism, greenwashing, energy efficient vehicles*

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Introduction

As a human being, transportation is one of the daily essentials. Transportation is one of the biggest carbon emission contributors. Realizing the effects of daily harmful consumption, consumers nowadays are more environmentally sensitive when it comes to purchasing long investment products like automotive products (Djermani & Sulaiman, 2017). Some companies are moving toward providing a greener solution such as EEV for its consumer (Govindan, Rajendran, Sarkis, & Murugesan, 2015; Kumar & Polonsky, 2017). EEV is a range of vehicles that consume less petroleum fuel and produce less carbon emission. EEV includes fuel-efficient internal combustion engine (ICE) vehicles, hybrid, electric vehicles (EV) and alternative fuelled vehicles powered by Compressed Natural Gas (CNG), Liquefied Petroleum Gas (LPG), Biodiesel, Ethanol, Hydrogen and Fuel Cell (MITI, 2014; Mohamed, 2015).

In Malaysia, local automotive market values at RM 43.67-billions and been ranked the third biggest automotive market in ASEAN. EEV represents 58.11 percent or 308, 807 out of 530,000 units of national vehicle production. This had shown a growing number of acceptance of the EEV among Malaysian (Ministry of International Trade and Industry, 2018). This had also depicted that Malaysians are becoming more environmentally sensitive and aware of their harmful consumption when it comes to purchasing long investment products (Y. N. Goh & Wahid, 2015; Lye, 2017). However, huge market value and growing trend of concern on preserving environment have created an opportunity for a few automakers to take chance to provide fake or unclaimed environmental sensitive EEV. These practices called as greenwashing that created negative perception toward buying EEV.

Literature has shown that there is an inconsistent relationship between environmental concerns as depicted in Table 1 below. In author's best knowledge, this may occur due to few factors. Firstly, there is a gap between consumers' favourable attitude towards the actual intention or behaviour or been referred to as 'green attitude-behaviour gap' (Groening, Sarkis, & Zhu, 2018). This has suggested that consumer that highly concerned about the environment may not translate their concern into action.

Hence, it was also suggested that there is a potential external variable that weaken the relationship. With rising greenwashing practices, this study proposes to add negative attitudes (cynicism) as a moderator. Moreover, previous environmental behaviour model studies are inconclusive. These studies do not consider factors that related to negative attitudes such as cynicism (Johnstone & Tan, 2015; Tan, Johnstone, & Yang, 2016). Negative attitudes will demotivate the desired environmental behaviour. It is important to study the effect of the negative attitude (Mohd Suki, 2015). By investigating the effect of negative attitude, the practitioner has to acknowledge this issue and find the ways to counteract the negative attitude.

Table 1: Summary of Finding for Relationship between Environmental Concern and Purchase Intention.

Literature	Relationship	Finding
Joshi & Rahman (2015)	Environmental Concern and Purchase Intention	Significance
Suki (2013)	Environmental Concern and Purchase Behaviors	Not significance
Rajadurai, Bathmanathan, & Azami (2018)	Environmental Concern and Purchase Behaviors	Significance
Yazdanpanah & Forouzani (2015)	Environmental Concern and Purchase Intention	Not significance
Lee & Yun (2015)	Environmental Concern and Purchase Intention	Not Significance

Source: Lee & Yun (2015), Joshi & Rahman (2015), Rajadurai, Bathmanathan, & Azami (2018)

Azami (2018),Yazdanpanah & Forouzani (2015) and Suki (2013), Secondly, Alwitt & Pitts (1996) and Fransson & Gärling (1999) highlighted that measurement specificity will weaken the relationship between environmental constructs and environmental behaviour. This has supported by a few empirical evidence by Groening, Sarkis, & Zhu (2018); Nayum, Klöckner, & Prugsamatz (2013) and Han, Pauwels, & De Zeeuw (2013). These researchers claimed that environmental domain studies should be addressed with the specific environmental approach. Therefore, this study will use VBN theory that has an environmental construct to measure the environmental domain. Building upon Value Belief Norm (VBN) theory and New Environmental Paradigm (NEP) theory, this research will look into the extended ERB model by redefining the gap between purchase intention with environmental concern. This study will add cynicism due to greenwashing practices as moderator into the ERB model.

Greenwashing Practices among Automakers

Greenwashing can be defined as tactics or strategies in which green public relation or green marketing is deceptively been used to promote the image of environmentally sensitive for organisation's product, policies, or brand image (Magnier & Schoormans, 2015). GreenPeace (2010) has called these misleading practices as a cynical use of environmental themes approaches to cultivate misbehaviour or termed as greenwashing. Greenwashing usually comes from an unverified claim made by any company that wanted to be associated with environmental concern and making a profit from it. GreenPeace (2010) claimed more than 55 percent of the environmentally sensitive claimed product is misleading and actually harmful towards the environment. Although greenwashing is not a new issue, it has been increasing over the year due to increase in demand for the environmentally sensitive product.

In this competitive automotive, some of frontlines companies such as Volkswagens and Mercedes are struggling to stay consistent in being *'green'* or *'sustainable'* (Majláth, 2016). These companies have found to often advertise their product without any proof. In 2015, Volkswagen (VW) Group, one of the biggest vehicle producers have been sued by United States Environmental Protection Agency (US EPA) for using fake emission test. VW's defected model produced up to 40 times more emission than US prohibited limit (US EPA, 2016). Aside from that, Japan's sixth biggest automaker, Mitsubishi Motor Company (MMC) admitting to cheating on fuel mileage test for 25 years. These companies have been sued for data manipulating from the test and overstate the fuel efficiency for 625 000 units of their model (BBC, 2016; Farrell, 2016).

These unethical practices will impact consumers' perception and trust in the automotive industry (Chaouali, Souiden, & Ladhari, 2017). Empirical studies had reviewed several impacts, suggesting that exposure to greenwash may lead to increase consumer cynicism and mistrust (Jahdi & Acikdilli, 2009), as appears to happen in other areas where deceptive advertising have been used. In general, the consumer usually will be cynical towards new technology that have been introduced to them. They will judge the outcome of adopting and not adopting new things before engaging to it. Even though consumer is aware and concern about preserving the environment, these two factors will demotivate them to actually adopt EEV as their alternative option.

Proposed Environmental Behaviour Model

Within the previous environmental problem approach research, environmental constructs have been adopted into an existing attitude behaviour model (L. Chan & Bishop, 2013; Groening, Sarkis, & Zhu, 2018). This study will extend Values, Belief, and Norm (VBN) theory by Stern, Dietz, and Guagnano (1995) that has evolved over the year and the construct in the theory has adopted into the environment problems. This strict causal model proceeds from an abstract level to behaviour and consist of four components as shown in Figure 1 below. The theory begins with values and transcends to specific belief and concern and end with behavioural intention. Hence, it proposed the ERB causal model that derived from VBN theory. The model descends from materialism as values to a specific outcome, purchase intention. The next section will explain the model and variables used in this study.

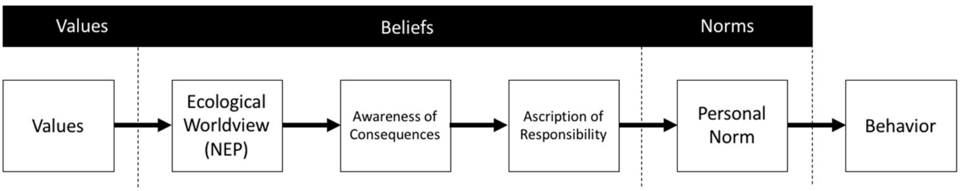

Figure 1: VBN Theory

Source: References :Stern, Dietz, & Guagnano (1995)

Model Conceptualization

In consequence of building upon VBN theory, Environmental Responsible Consumption Behaviour (ERB) conceptual model had been developed by W. Kilbourne & Pickett (2008). From value, which is materialism towards environmental belief. Finally, the belief will change into a norm and reflected by intention as shown in Figure 2 below. Following a brief examination of the constructs found in the proposed model, this subsection will discuss the relationships between the constructs and hypotheses.

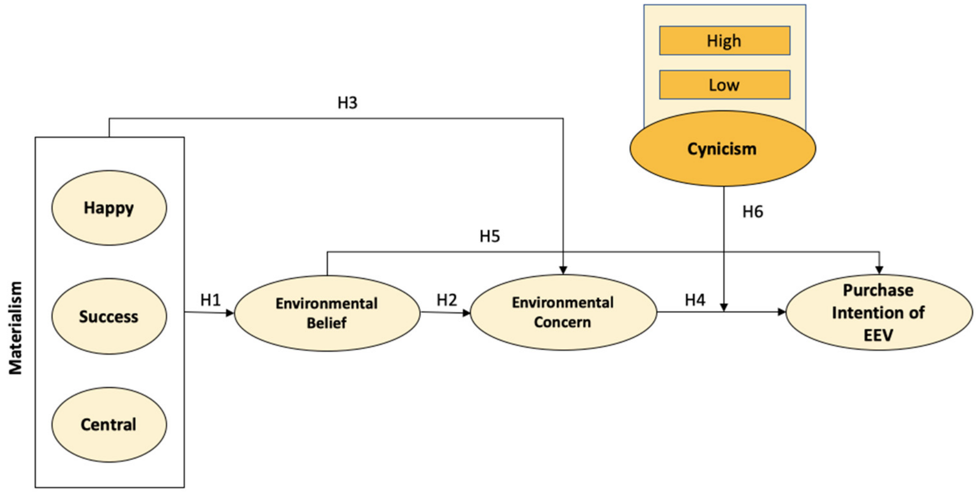

Figure 2: Hypothetical Framework

Source: Author's own construction

Materialism Values

According to Coward & Ellis (2016), materialism is referred to as a devotion to material needs and desires, the neglect of spiritual matters which can be defined as a way of life, opinion or tendency based entirely on material interests. Materialism can be seen as a value structure through the individual for seeking for more instrumental value from their good's ownership. In addition, they want a good that can reflect their identity and cultivate their subjective well-being. The previous review had concluded that materialism had an effect both on individualism and their social consequences. (Rastgar & Maleki, 2018; Kasser, 2018)

This study operationalizes materialism as individual value structure where a person seeks more instrumental value from their possession. Materialist seeks for subjective well-being and enhancement from their belongings (Richins & Dawson, 1992). Schlosberg & Coles (2016) depicted that materialism value is growing in less growing economies and making it a global phenomenon and there is a growing number of people that embrace materialism value.

This study focuses on the environmental degradation effect on materialism value. In specific, materialism has been viewed as a value that later transcend into belief. Lai, Liu, Sun, Zhang, & Xu (2015) claimed that materialism has a negative impact on the environmental belief. Materialism found consumer lifestyle has become one of the root causes of environmental degradation. Materialistic lifestyle usually dominated by social and personal preference without concerning about its effect toward the environment (Muhamad Syakir, Zuraidah, Thoo Ai, Norhayati, & Farrah Merlinda, 2017). For example, owning and driving a luxury vehicle may evoke materialist identity but it also polluting the environment.

Hence, realising this fact, the consumer will change their preference for less harmful consumption (Ahonen, 2017). In addition, it means decreasing materialism value in a person who are aware of harmful consumption's effect. If any individuals believe their daily consumption will harm the environment, they will start to make a more conscious decision by eliminating their personal materialistic desire (Haldane, 2016). Therefore, below hypothesis is suggested:

H1: *There is a negative relationship between materialism and environmental belief*

Environmental Belief

This study is extending the VBN theory (Stern et al., 1995) that depicted values will transcend to belief then proceed to norm. In this study, belief is operationalised as environmental belief. Theoretically, environmental belief and concern are derived from New Environmental Paradigm construct by Dunlap (2008) that measure environmental belief by integrating adverse consequences for valued environmental objects and perceived ability to reduce the threat.

Previous studies suggested that environmental beliefs are preceding to individual values (Pagiaslis & Krontalis, 2014; Ünal, Steg, & Granskaya, 2019). General beliefs are formed by human interaction or relationship with the environment and refer to general insight into the environment (Hiratsuka, Perlaviciute, & Steg, 2018). In specific, the belief is about the global human interaction has caused lots of environmental degradation that manifested by nature in form of natural disaster and climate change.

Facing global warming, consumers have become more alert about the effect of their consumption especially towards the environment (Chan & Bishop, 2013). Thus, showing that there is a belief among consumers regarding their daily consumption can contribute or even accelerate environmental degradation. This belief has later been translated into an attitude of concern on preserving the environment. Logically, a concern will not arise unless proceeded from belief. Thus, below hypothesis is suggested:

H2: *There is a positive relationship between environmental belief and environmental concern.*

Past literature highlighted that if the desired behaviour is harmful to the environment, an individual will change their daily preferences. This has been supported by Stern (2000) proposed that the link from values to environmentalism mediates beliefs because perceived consequences to the individual values will activate norms. Negative consequences from environmental degradation are descending from increasing harmful consumption. This harmful consumption has alternatively change individual values from nurturing materialistic value to post materialism that highly alert about their consumption's effect towards the environment or surrounding. Hence, below hypothesis is suggested:

H3: *Environmental Belief mediates the relationship between materialism and environmental concern.*

Environmental Concern

Diekmann & Franzen (2019) describes environmental concern can be associated with the awareness of the consequences of given behaviour, such as knowing the consequences of producing carbon dioxide emission. From that, the purchasing intention will be much influenced by the ecological problem. For this study, environmental concern encapsulates a consumer's affective evaluation of environmental issues (Ritter, Borchardt, Vaccaro, Pereira, & Almeida, 2015) and is often conceptualized as an immediate antecedent to environmental purchase intentions (Chen, Chen, & Tung, 2018; Nyilasy, Gangadharbatla, & Paladino, 2014).

Existing literature has depicted that consumers' concern for environmental issues may determine their green purchase behaviour (Y. N. Goh & Wahid, 2015; Mohd Suki, 2016; Sharma & Joshi, 2017). This is supported by Magnier & Schoormans (2015), a consumer with a high level of concern toward preserving the environment is willing to pay premium price compared to low environmental concern consumer. More recently, Newton *et al*. (2015) showed that environmental concerns motivate customers to learn about the outcomes of environmental purchases. Specifically, customers with a high degree of environmental concern were found to be well-aware of the claims made by the green product and were actively involved in identifying the additional information to aid in their environmental purchase decision.

On the other hand, contradictory findings have been reported. For example, Hwang (2016) did not find environmental concern influences the purchase intentions towards organic food in both older and younger consumers. More recently, Yadav & Pathak (2016) extend the theory of planned behaviour in examining the antecedents of purchasing organic food among young consumers in a developing economy. Their findings showed that environmental concern did not influence the purchase intentions for organic food. While researchers have attributed these inconsistencies in the relationship to a number of external factors including demographics, it is widely accepted that environmental concern has a low to moderate correlation with green purchase intentions (Han, 2015; Newton *et al.,* 2015). These show that there is a need to integrate external variables to enhance the relationship between environmental concern and purchase intention.

In conclusion, environmental concern is likely to have a direct positive relationship with purchase intention. Many studies established attitudes as predictors of behaviour and behavioural intentions. Therefore, the below hypothesis is proposed:

H4: *There is a positive relationship between environmental concern and purchase intention.*

If the individual believes that the environment as a valued object is threatened, the environmental concern will increase (Pagiaslis & Krontalis, 2014; Ünal, Steg, & Granskaya, 2019). This will then increase the likelihood of more environmentally friendly consumption behaviour. Consumer nowadays believe that their consumption can affect and harm the environment and this belief has transferred into concern on reducing their harmful consumption such as choosing EEV as an alternative for transportation (Axsen & Kurani, 2013; Lai, Liu, Sun, Zhang, & Xu, 2015). EEV has been viewed as an alternative to better ways to move from one place to another as it consumes less fuel and emitted less emission. Therefore, the below hypothesis is proposed:

H5: *Environmental concern mediates the relationship between environmental belief and purchase intention.*

Purchase Intention of EEV

Purchase intention is not an actual purchase. Once a customer decided to buy something, he or she needs to implement the decision and complete the actual process. Lai et al., (2015) describe that purchasing automotive products in the industry is a complex buying behaviour, whereby it involves high consumer involvement and significant perceived differences among brands. Environmental concern is likely to have a direct positive relationship with purchase intention. Many studies establish attitudes as predictors of behaviour and behavioural intentions (Ajzen & Driver, 1992; Ajzen & Fishbein, 1980). Purchase intentions with regards to individual products were found to be determined almost exclusively by attitudes towards the product.

For this study, purchase intention is referred as green purchase intention. It is becoming very vital to distinguish concept of purchase intention and green purchase intention. Joshi & Rahman (2015) claimed the earliest conceptualization of green purchase by Kousar et al., (2017) that describe green purchasing as a purchase of environmentally friendly products and avoiding products that harm the environment. Some researchers refer to green purchasing as adoption of green product and green acquisition. It is also a complex process of ethical consumer's decision-making behaviour highlighting socially responsible behaviour. It involves considering the public consequences into consumer's private purchase consumption and trying to bring social change by having purchasing power. Conventional purchasing is defined as a process of evaluating alternative to match a consumer problem without the consideration of environmental impact or degradation (S. Joshi, Patel, & Dave, 2018; Sharma & Joshi, 2017).

In addition, the dependent variable used is purchase intention. Buying an automotive product is a part of a long term commitment purchasing that involve a payback period (C. C. Chen, Chen, & Tung, 2018; Hong, Khan, & Abdullah, 2013). Purchasing a new car involve high purchase decision that involves complex process. It is difficult to measure actual purchase decision of EEV due to time constraint and practicality of the study.

Cynicism

Cynicism refers to "a lack of belief in the sincerity or goodness of human motives and actions and is manifested in feelings ranging from 'distrustfulness [and] doubt to contemptuous and mocking disbelief' (Hickman, Piquero, & Piquero, 2004; Regoli, 1976). Cynicism is considered one of the main factors that trigger consumers' decisions to adopt a new product or service (Helm, Moulard, & Richins, 2015). Traditionally, from the marketing point of view described the relationship between the consumer and the market as cooperative and mutually beneficial (Groening, Sarkis, & Zhu, 2018). However, an emerging and diverging stream of research assumes that consumers tend to generalize their suspicion of any product orservice as a defensive strategy, specifically when they are unfamiliar with the product/service (S. K. Goh & Balaji, 2016; Leonidou & Skarmeas, 2017)

In general, consumers often tend to be cynicism when new technologies are introduced such as EEV. Plus, this technology could also be seen as novel as the mass-market consumers had little exposure (Schuitema, Anable, Skippon, & Kinnear, 2013). When consumers doubt the environmental qualities or claims made by the green products, they are likely to evaluate them less favourably than they would if they had no such doubt (M.-F. Chen, 2015). Thus, in the presence of cynicism, consumers should exhibit reluctance in buying green products.

The author operationalized cynical individuals as a group of individuals that may be fooled by company claims (S. K. Goh & Balaji, 2016; Leonidou & Skarmeas, 2017). Cynicism will make an individual perceive reliability and usefulness of a claim as a misleading act by the company (Torres, Reling, & Hawdon, 2018; Yamamoto, Kushin, & Dalisay, 2017). Greenwashing practices that have been committed by a few automakers mentioned before has become one of the consumers' cynicism trigger towards the automotive industry in general and EEV in specific. Magnier & Schoormans (2015) asserted that deceptive claims or advertisements will encourage negative attitudes such as cynicism. Therefore, the below hypothesis is proposed:

H6: *Cynicism moderates the relationship between environmental concern and purchase intention of EEV*

Implication of the Study

Sharma & Joshi (2017) and Kumar & Polonsky (2017) depicted that there is a tremendous increase in green consumption's research. However, a small number of researchers are exploring factors that weaken green consumption or intention. These negative factors actually will demotivate the final outcome that has been projected from a few motivations. The consumer with high environmental concern and intended to perform green consumption may change their preference due to these few negative factors. It is important to investigate the negative factors interaction towards green consumption or behaviour (Tan, Johnstone, & Yang, 2016).

Besides that, Kilbourne & Pickett (2008) describe the inconsistent results yield from behavioural model theories. One of these is the issue of measurement specificity. Within the environmental domain, measurement specificity problems weaken the relationship between different environmental constructs and environmental behavioural domain theories (Alwitt & Pitts, 1996; Fransson & Gärling, 1999). This study will extend the ERB model (W. Kilbourne & Pickett, 2008) that evolved from VBN theory to address specific environmental degradation's effect towards green consumption. Hence, this study provides a more accurate result from comprehensive model and theory.

Ministry of International Trade and Industry, Malaysia (2018) projected RM 12.5 billion export value in automotive industry. It has been supported by 52 percent of national production is EEV range. It showed huge market growth and huge EEV's acceptance. Investigating negative attitude or influence that can demotivate intention of engaging towards environmentally responsible behaviour among Malaysian is crucial and beneficial. This allow automaker and policy maker to acknowledge this issue and later, create custom marketing approach to address high cynical consumer group.

Methodology

Sample

Hair et al. (2017) and Henseler et al. (2014) propounded that sample size calculation should follow a more elaborate approach such as based on statistical power and effect sizes. The authors also suggested researchers to run an individual power analysis such as by employing the G*Power analysis. Hence, by employing the G*Power analysis, with α = 0.05, anticipated effect size of 0.15, desired statistical power of 0.95 and number of predictors is 5. Hence, the minimum required sample size for this study was 138 samples. This study employed multi-stage which is purposive sampling and convenience sampling. Respondents will be selected within age range above 21 years old which is Malaysia's car driving age and has national minimum income of RM 1050. Aside from that, respondents will come from various states in Malaysia.

Instrument Development

A 35-item set of self-administrated and unguided questionnaire was developed for this study, and in line with existing literature as shown in table 1, a multi-item Likert scale was applied. The variables were measured using the 7-point Likert Scale, with 7 being 'Strongly Agree' and 1 being 'Strongly Disagree', except for cynicism which was measured using a 5-rank scale. Because respondents were Malay-speakers, it was important that the questionnaire be precisely translated from English to Malay. Therefore, a back translation was performed, a procedure comprehensively been used to test the precision of the translation in a cross-cultural survey (Leonhardt, Liebers, Dionne, & Latza, 2014).

Validated instruments were adapted from related previous studies and been pretested by three experts (academician, practitioner and potential respondent) as shown in Appendix A.

From Appendix A, factor loading was used to test indicator reliability. High loadings on a construct indicate that the associated indicators seem to have much in common, which is captured by the construct (Joseph F. Hair, Hult, Ringle, & Sarstedt, 2017). Factor loadings greater than 0.50 were considered to be very significant (Hair, Hult, Ringle, & Sarstedt, 2016). The loadings for all items exceeded the recommended value of 0.5, except for item CEN2 which was eliminated from the scale due to low loadings. The loading for the remaining items in the model has fulfilled all the requirements. For testing construct reliability all the composite reliability (CR) values ranging from 0.804 to 0.878 were higher than 0.7 (Henseler, Ringle, & Sarstedt, 2014) which adequately indicates that construct reliability is fulfilled. Therefore, CR for all constructs were considered to be sufficiently error-free.

Moreover, for testing convergent validity (the extent to which a measure correlates positively with alternative measures of the same construct), this study used the average variance extracted (AVE), and it indicated that all AVE values were higher than the suggested value of 0.50 ranging from 0.572 to 0.707 (Hair et al., 2017). The convergent validity for all constructs has been successfully fulfilled. Hence, all the items used for this study is sufficiently pass the measurement assessment and appropriate for fieldwork/data collection.

Data Analysis

In this research, data will be analysed using the Statistical Package for Social Science (SPSS) version 23.0. The descriptive analysis will be applied in analysing the demographical data of the respondents. The descriptive analysis may also be used to describe the hypothesis in a simple way. This study will employ multivariate analysis by using Partial Least Squares - Structural Equation Modelling (PLS-SEM). This tool is used as an examination of a set of relationships between one or more independent variables and one or more dependent variables, regardless of the variables' characteristic; either continuous or discrete (Henseler, Ringle, & Sarstedt, 2015; Marko Sarstedt, Christian M. Ringle, 2017).

Based on the literature and rule of thumb, the PLS-SEM technique was preferred as a tool to analyse the data gathered in this study due to several reasons. First, PLS-SEM was preferred in this study due to its' better prediction capability. It has been acknowledged that PLS-SEM is the more suitable analysis technique to be used in studies that are designed to examine the predictive power validity of the exogenous variables on the endogenous variable, where the theoretical information related to the underlying theory that supports the proposed research model is less available(Marko Sarstedt, Christian M. Ringle, 2017).

For that reason, PLS-SEM was identified as a more appropriate data analysis mechanism to assess the relationships hypothesized in the study, as the research model of this study was very complex with three independent variables, two mediators, 1 dependent variable and moderators'-SEM is still based on theory, but strictly limited for theory testing, theory building and for comparing alternative model structures (Henseler, Dijkstra, et al., 2014). It is also "data driven in order to be predictive and to provide knowledge and new theoretical rationale about the researched phenomenon" (S. Davcik, 2014). Since the objective of the present study was to explore the extent of which factors at happiness, successful and centrality (exogenous variables) are associated with purchase intention of EEV (endogenous variable) and there was no well-established theory that could directly govern the proposed research model, PLS-SEM was therefore a more potentially appropriate tool for data analysis.

Implication of the Study

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Conclusions

Currently, technologies that are sensitive towards environment has becoming a trend (Kousar, Khan, & Khan, 2017). As one of the biggest industries that contributed to carbon emission, automaker starting to adopt these technologies to the market. Due to this, the government has created a few policies to ensure the technologies used are up to the standard of reducing the impact on the environment (Petroff, 2017). The automotive industry has become more competitive due to increasing awareness toward this industry's effect towards the environment. Since then, automakers try to stay relevant by integrating new technologies that are sensitive towards environment by reducing the carbon emission and fuel consumption.

United States Environmental Protection Agency (2016) had predicted 2016 until 2018 would be a good year for EEV sales that has been driven by continued growth, low interest rates, and reduced gasoline prices. The sales projection from 14.5 million in 2013 to 16.4 million in 2014. It has been projected that it will increase from 16.6 to 17 million by the end of 2015 which equivalent to almost 80 percent of the world vehicles sales. This data had shown a tremendous adoption and acceptance of EEV by the consumer. Due to this, the manufacturer offered their consumer with a various range of EEV and technologies to choose from.

Huge offering by automaker has also created an issue of greenwashing practices. A few automakers taking chances to advertise their unverified environmentally sensitive claimed EEV to grab the market for environmentally concern consumer. These practices yet to be discovered and investigated by the researcher (Lyon & Montgomery, 2015; Majláth, 2016). Although consumers have high environmental concern and intended to purchase a green product or EEV in specific, greenwashing practices will trigger cynical attitudes. Hence, this study will investigate the interaction of cynicism (as moderating variable) between environmental concern and purchase intention of EEV.

Apart from that, this conceptual paper is the earliest article produced from the research. It overviews the background area that motivates the research, delineates the research questions, and hypotheses to be tested, and reviews the literature relevant to the major areas in marketing, such as materialism, cynicism, environmental concern, and purchase intention. Future articles to be generated from this research will discuss greater details on the aspects of quantitative methodology used, survey instruments and administration, descriptive, and inferential results, as well as managerial implications of this research. Findings from this research will assist the car manufacturing industry to further acknowledge the barriers in promoting EEV in order to compete in the global market strategically.

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Appendix A

Questionnaire items and Statistics

	Item Deleted	Loading	CR	AVE
Material Value Scale				
Success	Adopted from Richins (2004)			
1) I do pay much attention to the material objects other people own. Saya memberi perhatian kepada kebendaan yang dimiliki oleh orang lain	n.a	0.782	0.607	0.885
2) I do place much emphasis on the amount of material objects people own as a sign of success. Saya meletakkan kepentingan terhadap kebendaan yang dimiliki seseorang sebagai tanda kejayaan.		0.850		
3) I admire people who own expensive objects. Saya mengagumi individu yang memiliki barangan mewah.		0.804		
4) The things I own say a lot about how well I'm doing in life. Barang yang saya miliki menggambarkan tahap kehidupan saya.		0.708		
5) Some of the most important achievements in life include acquiring material possessions. Diantara pencapaian yang terpenting dalam kehidupan adalah memiliki harta benda.		0.714		
Centrality	Adopted from Richins (2004)			
6) I like a lot of luxury in my life Saya gemar kemewahan dalam hidup saya.	One (2)	0.798	0.543	0.825

7) I usually do not buy necessary things I need. Saya biasanya tidak membeli semua barangan yang saya perlukan.		Deleted		
8) I put emphasis on material things than most people I know Saya menitikberatkan kebendaan daripada kebanyakan orang yang saya kenal.		0.756		
9) The things I own are all that important to me. Barangan yang saya miliki semuanya penting bagi saya		0.631		
10) Buying things gives me a lot of pleasure Membeli barang memberi saya keseronokan.		0.752		
Happiness	Adopted from Richins (2004)			
11) I do not have all the things I really need to enjoy life. Saya tidak mempunyai semua barangan yang saya perlukan untuk menikmati kehidupan.	n.a	0.599	0.578	0.871
12) I will be happier if I could afford to buy more things. Saya akan menjadi lebih gembira sekiranya saya mampu membeli lebih banyak barangan.		0.828		
13) I would be any happier if I owned nicer things. Saya akan menjadi lebih gembira sekiranya saya memiliki barangan yang lebih baik.		0.860		
14)My life would be better if I owned certain things I do not have. Kehidupan saya akan menjadi lebih baik sekiranya saya mempunyai beberapa barangan yang tidak saya miliki.		0.747		
15) It sometimes bothers me quite a bit that I cannot afford to buy all the things I'd like Kadangkala saya sedikit terganggu apabila saya tidak mampu membeli kesemua barangan yang saya suka.		0.739		
Environmental Belief Scale	Adopted from W. E. Kilbourne *et al.* (2009).			
16) Many types of pollution are rising to dangerous levels. Pelbagai jenis pencemaran semakin meningkat kepada tahap berbahaya.	n.a	0.714	0.572	0.869

17) Some living things are being threatened with extinction. Beberapa benda hidup diancam dengan kepupusan.		0.805		
18) Global warming is becoming a problem Pemanasan global menjadi suatu masalah.		0.858		
19) Thinning of ozone layer is an environmental problem Penipisan lapisan ozon merupakan masalah alam sekitar.		0.755		
20) The availability of clean water will become a problem in the future Bekalan air bersih bakal menjadi masalah pada masa hadapan.		0.63		
Environmental Concern Scale	Adopted from W. E. Kilbourne *et al.* (2009)			
1)Humans are severely abusing the environment. Manusia telah merosakkan alam sekitar dengan teruk sekali.	n.a	0.765	0.542	0.854
2) Major political change is necessary to protect the natural environment. Perubahan besar dalam politik perlu dilaksanakan untuk memelihara alam sekitar		0.585		
3) Anti-pollution laws should be enforced more strongly. Undang-undang anti pencemaran perlu dikuatkuasakan dengan lebih tegas.		0.831		
4) I would be willing to reduce my consumption to help protect the environment. Saya sanggup mengurangkan penggunaan saya demi membantu memelihara alam sekitar.		0.722		
5) I am very concerned about the environment. Saya sangat prihatin terhadap alam sekitar.		0.756		
Cynicism Scale	Adopted from Chaouali *et al.* (2017)			
1) People will tell a lie if they can gain by it. Individu akan berbohong jikalau individu tersebut memperolehi sesuatu daripada perbuatan tersebut.	n.a	0.796	0.635	0.874
2) People claim to have ethical standards regarding honesty and morality, but few sticks to them when money is at stake.		0.771		

Individu mendakwa dirinya mempunyai nilai etika mengenai kejujuran dan akhlak, tetapi sedikit sahaja yang berpegang teguh pada nilai etika apabila wang dipertaruhkan.				
3) People pretend to care more about one another than they really do. Individu berpura-pura memberi lebih perhatian kepada orang lain berbanding perhatian sebenar yang diberikan.		0.856		
4) Most people are not really honest by nature. Kebanyakan individu tidak jujur secara alami.		0.762		
5) Most people are just out for themselves. Kebanyakan individu mementingkan diri mereka sendiri.		0.796		
Purchase Intention Scale	Adopted from Oliver and Lee (2010)			
1) I will request further information on the EEV. Saya akan memperolehi maklumat lanjut tentang EEV.	n.a	0.751	0.617	0.889
2) I would like to test drive the EEV. Saya ingin memandu uji EEV.		0.754		
3) I think that purchasing EEV would be a wise decision. Saya rasakan membeli EEV adalah keputusan yang bijak.		0.853		
4) I intend to purchase EEV in the future Saya berhasrat membeli EEV pada masa hadapan.		0.864		
5) I intend to purchase EEV as next/second car. Saya berhasrat membeli EEV sebagai kenderaan kedua/seterusnya saya.		0.693		

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PREVALENCE OF DEPRESSION AND ITS DETERMINANTS AMONG INDONESIAN DOMESTIC WORKERS IN MALAYSIA

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ABSTRACT. Indonesian women migrant workers are a big population in most Asian countries. Past research indicates a large percent of Indonesian domestic workers being exposed to exploits, verbal and sexual abuse that further exposes them to various problems such as psychological, social, cognitive, behavioural, and physical challenges. Few subjects have thus far have been taken out on the prevalence of and associate factors with depression among Indonesian domestic workers in Malaysia. The objective is to know the prevalence of and the associated elements of depression among Indonesian domestic workers in Malaysia. This study engaged mix method. Quantitative information was accepted from 380 respondents by using Beck depression inventory (BDI-II), while qualitative data was collected from selected 32 respondents who have moderate depression (BDI-II) through interview. The questionnaire of total randomly 380 subjects were retrieved and 228 where participants who have depression symptom according to BDI-II. Three from five Indonesian domestic workers in Malaysia are having a depression symptom (60 percent). This study found that occupation, financial hardship, social support, and level education are the associate factors of depression among Indonesian domestic workers in Malaysia. Meanwhile, most of domestic workers who live with their employer have a moderate to severe depression.

The awareness created through this study will enable proper government-to-government policy on domestic migrant workers matters, hence reducing the low rate and policy level intervention. It will as well contribute to the consistency of knowledge on depression of Indonesian domestic workers in a foreign country, especially the advocates and the social workers employed by the Indonesia embassies in all countries.

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Introduction and review of literature

Malaysia has 3-4 million migrants, according to the ILO (International Labor Organization, 2016) with the majority of the workers from Indonesia. It was established that 50.9% of the migrant workers in Malaysia are Indonesian (Ahmad, 2012). Indonesia is one of most migrant workers sender among Southeast Asian countries (Abella and Ducanes, 2009). It is predictable that 76 percent of Indonesian migrant workers are women (ILO 2012) and 90 percent of them are domestic workers (Andrevski et al., 2014).

According to the International Labor Organization (ILO), almost 53 million are employed as migrant workers and the majority of them are women (ILO 2013). About 41 percent of them are working in Asia (ILO, 2013). Malaysia has more than 400,000 registered migrant domestic workers from numerous countries, and Indonesian making up 90% of them (Hakim, 2015). Migrant domestic workers (MDWs) are wage-earner working in a household, under whatever method and period of remuneration, who may be employed by one or by several employers and who receive no financial gain from their work in other country (D'Souza, 2010, p. 9). ILO said that mostly MDWs have very low incomes, work extremely long hours, have no day off, are exposed to risks of physical, mental and sexual abuse and limitations on freedom of movement due to their working conditions (ILO,2013; Ullah,2013).

Migration is hard and complex as it has psychological, social, political, and economic consequences for migrating groups, as well as for their country of origin and host country. Depression and PTSD (post-traumatic stress disorder) are the most prevalent psychiatric disorders among Mexican migrant workers in the USA (Hovey & Magana, 2000), Latino migrants residing in the USA (Hiott et al., 2006), as well as China internal migrant workers (Dai et al., 2015; Lam & Johnston, 2015; Qiu et al., 2011). Moreover, studies also found a high suicide rate among migrants (Lipsicas et al., 2012; Al-maskari et al.,2011). The associate factors of depression among migrant workers was significantly correlated with their physical illness, low mental health, low income, heavy workload, debt, and kind occupation such as construction workers and domestic workers (Reza et al., 2018; Al-Maskari et al., 2011; Sarwani et al., 2013; Nadim et al.,2016). However women migrant have higher prevalence rates of depression than men (Aroian et al., 2003; Berry et al., 1987; Bhugra, 2003; Furnham & Shiekh, 1993; Van der Ham et al., 2014).

Recent studies on Indonesian migrant workers in Malaysia found that workplace discrimination was positively related to their psychological distress (Noor & Shaker, 2017), the low quality of life (Iqbal, 2016), subjected to a series of exploitative that cause mental health problem (Andrevski & Lyneham, 2014; Green & Ayalon, 2015) and faced three situations namely demanded, exploited, and humiliated (Maksum, 2017). However, there are only few studies on the level and associate factors of depression among Indonesian domestic workers.

Migrant Domestic Workers (MDWs) are among the most vulnerable among migrant workers. Depression among MDWs is high (Malhotra et al., 2013). For example, in Brazil (Sales and Santana, 2003), in Kuwait (Zahid et al., 2003), in Israel (Ayalon, 2012), in Hong Kong (Lau et al., 2009), and in China (Moderno et al., 2018). Studies found the associate factors for MDWs with depression are separation from family, relatives, and loved ones (Fox & Kim-Godwin, 2011; Hiott et al., 2006). This complements the result of a study on Filipino domestic workers, where it was established that they are subjected to depression because of their working environment, loneliness, homesickness, challenges of culture transformation and financial constraints (Van der Ham et al., 2014). Domestic workers are cut from outside world; they are often cut from the social interaction beside their employ. Therefore, most domestic workers who experienced depression and trauma remain silent due to the fact that there is no one to see, report, or trace abusive behaviours (Dekker & Barling, 1998)

Methodology

Instrument

The instrument used to measure depression was the Beck Depression Inventory-II (BDI-II), which have been outlined by Beck (1985). BDI-II is valid, short, simple, and most frequently used because it is a self-rating scale to assess depression (Demyttenaere, De Fruyt, & rgen, 2003). BDI scales of 21 items covering the whole of the symptoms of depression such as sadness, despair, failure mood, bored and discontent, guilt, frustration, feeling of being punished, hating you, self-blame, desire for suicide, rate of recurrence of crying, inability to take decision and isolation from socializing. BDI-II is a valid measure of depression for Indonesian general population. The reliability of the Indo BDI_II, Cronbach's alpha, analysed for all participants, was .90 for the overall score (21 items) of the Indo BDI-II. (Ginting et al., 2013).

Sampling procedures

Randomly sampling to find participants through the support of Indonesian embassy in Penang Malaysia where the records of registered and genuine employers of Indonesian domestic workers. About 380 Indonesian domestic workers received questionnaire and depression test and 228 were have depression symptom according to BDI-II measurement. From this number, 32 selected participants that have moderate depression symptom and have worked more than 2 years in Malaysia were subjected to interview. Face to face in-depth interview with structure (30-50 minutes/ each interview) were conducted until data saturation was achieved. Interviews were audio recorded and transcribed verbatim. Transcribed data were analysed using thematic analysis (Braun & Clarke, 2006).

Result and Discussion

The quantitative data is collected and analysed using Beck Depression Inventory –II (BDI-II). Descriptive analysis was performed for the background characteristics of the respondents and prevalence of depressive symptoms. Multiple logistic regressions were carried out to determine the associated factors of depressive symptoms from 228 participants and qualitative data collected through interview 32 participants who have moderate depression and working in Malaysia above 2 years. Thematic analysis was done on the verbatim transcripts using three step approach: familiarisation with primary data, generation of initial codes and development of themes (Braun & Clarke, 2006). Codes were reviewed, and related codes were collated into subthemes. Subthemes were gathered into themes, which provided a wider encompassing meaning of the subthemes. The generation of codes, subthemes and themes were conducted independently by the two researchers. Findings from each researcher were then compared, and the differences were discussed among the team until consensus was reached.

Demography

The demography of participants is shown in table 1.1. The age range of 18-28 years have the highest frequency (84.6%). The high school graduates were the highest percentage (84.2%). The participants who are single have the highest percentage (85.5%). The result shows that domestic workers that are not living with the employer have the highest percentage (84%). Domestic workers who live with their employers were all having depression symptom (BDI-II). Participants have worked more than 2 years are (62%).

Table 1.1. Demography profile

	Frequency (n= 228)	Percent (%)
1. Age:		
18-28	193	84.6
29-39	24	10.5
40-49	10	4.4
50-60	1	.4

	Frequency (n= 228)	Percent (%)
2. Education:		
Elementary (SD-SMP)	24	10.5
High school (SMA)	192	84.2
University	12	5.3
3. Marital Status:		
Single	195	85.5
Married	20	8.8
Widow	13	5.7
4. Occupation:		
Domestic workers not live in	192	84.2
Domestic workers live in	36	15.8
5. Time in Malaysia		
0-1 year	89	39.0
2-4 year	109	47.8
above 5 year	30	13.2
6. Depression Level:		
0-13 (minimum)	6	2.6
14-19 (mild)	99	43.4
20-28 (moderate)	82	36.0
29-63 (severe)	41	18.0

Source: authors' compilation

Quantitative Data

Depression has an association with age, education, relationship status, occupation, and time in Malaysia. Pearson correlation was used the association factors of depression with demography. The relationship between age and depression shows that there was a very weak positive relationship. Meanwhile, the statistically significant value (P - value = 0.091) indicates that P> .0005. The relationship between education and depression revealed (r = -.249, p- value, = 0.000) a negative relationship. Education have significant factors and a strong and negative relationship with depression. The relationship between marital status and depression shows (r = .139, p- value .018) a positive relationship, although very weak. The relationship occupation and depression level (r = .290, p-value.000). Its show a moderate positive relationship, the more dirty, difficult and dangerous (3D) their type of occupation, the higher the depression level. Relationship Participants stay in Malaysia and their depression shown (r = -.001, p-value 0.494) very weak and negative relationship. Education has strong and negative relationship and occupation have strong positive relationship.

Table 1.2. Associate factor of Depression among Indonesian domestic workers

		D Level
Pearson Correlation	D Level	1.000
	Age	.089
	Education	-.249
	Marital status	.139
	Occupation	.290
	Time in Malaysia	-.001
Sig. (1-tailed)	Age	.091
	Education	.000
	Marital status	.018
	Occupation	.000
	Time in Malaysia	.494

Source: authors' compilation

Qualitative Data

Table 1.3. Qualitative data was gathered using interview from 32 participants.

Theme	Sub-theme	N=32
1. Occupation	• Employer	29
	• Working hours	32
	• Excessive work demands	30
2. Social Supports	• No communication to the Family	20
	• Family Problem	26
	• Love relationship	11
	• Discrimination as domestic workers	20

Theme	Sub-theme	N=32
3. Less spiritual aspect	• No religious activity	30
4. Hard to adjust	• Bad experience in first year	8
	• Adjusting life style	20
5. Financial hardship	not have salary every month	28
	The agents cut and take their salary	30

Source: authors' compilation

Job Environments

i). Employer

The most causes of Twenty-nine of participants' depression arise from their relationship with their employer. Their employer exploit demanded and abused them.

> *"My boss always angry at me, she screamed and bit some time with no reason just to release her anger to me. I always sick because I am very scared and not enough rest; so many things must to do sometimes I have bad dream that she will kill me"*

There are five of domestic workers who experience sexual abuse and were forces to sleep with their boss whenever the boss wants it.

> *"My Boss rape me many times and he threaten me if tell his wife. That why I run away because if I continue stay there, I will be crazy. I feel so sinful and dirty."*

ii). Working hours

All participants have as cause factors of depression the working hours. They have extremely high workload and extended work hours. Participants who live in with their employer work twenty hours and have no day off.

"I always work… work, no rest at all. Sometimes I don't have time even to eat and no off day. I just slept 3 hours every day; do many things".

The participants who do not live in with their employer have to work 12–14 hours per day because their agency forces them to work within several houses per day.

"*I work 12-13 hours per day because my agency asks me to work three to four houses in a day and no off day. If I late to come even five minutes late my o agency will take one-hour's fee*"

iii). Excessive work demands

Thirty participants experienced exhaustion because of so many things must be done every day and have to perform all kinds job from house cleaning to taking care of sick people.

"I have to do all kinds job even to clean up old sick women. Taking care sick old women requires me to help like professional nurse which is I cannot do by the ask me to do that. I have job that suppose handle by three people. That why after two years here I lost 25 kg I am so thin now."

Ten participants received risky work demand but they don't benefit from safety at work so they encounter accidents many times without insurance cover.

I worked in the morning in their house and at night working in their restaurant. I always have to cut many big fish and cook it; can you see I lost half of my finger and my employer didn't cover any medical expenses

Social support

i). No communication with the family

Seven participants became very anxious because they did not know what is going on with their families. They cannot contact their family back in Indonesia because their agency does not allow them have a phone. Moreover, they are also isolated from the world outside because they cannot go out without their boss

> *"I feel so anxious because since I work here, I never heard news about my family. Maybe my children so angry at me because I never contact them or maybe my husband already married to other women" (cry)*
> *I am so lonely, no friends and never talk to my family. I never go out by myself and always with my boss and I cannot talk with others if go out with them" (angry)*

Thirteen of the interview participants have lived in dorm that agency provided but have restriction to the use of a phone.

> *"Even though I live with my friends in this hostel but we cannot call our family back in our home town. I always anxious think too much about my family because I miss them so much. I leave my child when he is still baby. So I always think that he will never recognize as his mother since I never have contact with him (cry)*

ii). Family problem

> *"I came to Malaysia because I want to run away from my village. My husband has affair with my best friend. I cannot forgive my husband even until now I still very sad when I remember him*

iii). Love relationship

Five participants are under twenty years old so they are still very young and do not have experience with men so many men take advantage of that. However other six of them are widows who still desire a relationship with a man.

> *"I have love relationship with Bangladesh men. I was pregnant but he asked me to abort my baby (cry). I feel so bad and guilty even until now and the worst things he left me because he has affair with my friend (cry with anger) that why I tried suicide, but I remember my mother*

iv). Stigma as migrant domestic workers

Stigma as domestic migrant workers are second class or low class often experienced discrimination. This experience often makes migrant workers feel uncomfortable and not acceptances and many of them were bullied by the locals.

"I feel I don't belong anywhere in Malaysia. They always talk bad to me and look down on me because People here see Indonesian as bad people".

No religious activity

Most of Indonesian domestic workers do not have free time to perform their religious activities. The agents and their employers do not allow them to perform religious activity. It makes participants feel guiltier because they don't have religious activity and also no inner power to face the adversities and challenges. So they feel hopeless, hence depressed

"I was devoted Muslim but since I work here I never take sholat/ prayer (cry). I am so sinful and scared of God's judgement. My agent's rule cannot perform sholat."

Hard to Adjust

i). Bad experience during the first year

Eight of participant had hard and bad experiences in their first year in Malaysia that cause them trauma and scared them to meet the local people even after two year working.

"I still remember until now when first time I arrived here. The gangster bit me and ask all my money.

ii). Adjusting life style

"I come from a remote rural village. I am not used to modern and technology business of the city and I also have to learn to use washing machine, all cooking staff are very modern I don't know how to use it that why my boss always angry at me. I run away because I don't know how to live in the modern house "

The qualitative data found that associate factors of depression in Indonesian domestic workers in Malaysia are occupation, financial hardship, lack of social support, lack of spiritual activity, and hard to adjusting life in Malaysia. However, occupation, financial hardship, and lack of social support are the most cause factors of depression.

Discussions

Quantitative and qualitative data show that occupation, financial hardship, lack of social support, and education are the biggest cause factors of depression among Indonesian women migrant workers in Malaysia. This result supports the earlier study among Latina migrant workers where it was found that exposure to family conflict, perceived discrimination, and economic insecurity were associated with more depressive symptoms. Furthermore, economic insecurity were associated with a threshold of depressive symptoms that could be clinically significant, above and beyond family conflict (Roblyer et al., 2016; Zhong et al., 2016)). Study on depression and resilience among Iranian migrants in Australia found that being younger, being unmarried, having a shorter duration of residence in Australia, having an incomplete tertiary education, being unemployed, and experiencing higher levels of discrimination are significantly related to a higher level of depression (Hosseini et al.,2017).

Occupation (difficult, dirty and dangers job) in this study mean the kind of responsibilities and also their live in with their employer or not. Employer, working hours, excessive work and requires skill that they not train to do (too much demand) are greatest causing factors of depression among Indonesian domestic workers. In line with demand-Control Theory of stress, people working in high tension jobs are more disposed to a variety of psychological and physical problems (Karasek and Theorell, 1990). Excessive work demands, job insecurity, unemployment, and low status jobs were commonly reported sources of stress (Roura et al., 2015). This fact is in line with the experience of Indonesian women migrants in Taiwan, where it was found that have fatigue and leads to depression symptom because their risk of her job (Palupi et al., 2017). MDWs in Singapore who take cared dementia were 5.47 times (p = 0.013) more likely to experience stress than local (Ha et al., 2018). Relationship with their employer is associate factors of their depression. MDWs work together with employer in taking care of person with dementia more effective and have better wellbeing too (Tam et al., 2018). Some studies found that the insecurity of workplace cause lack of social well-being such as harsh to the new environment, a persistent fear of sexual abuse due to poor intergroup relations; lack of freedom and choice in working environment; and lack and restricted access to public services and welfare benefits (Reza et al., 2018; Bernardo et al., 2018). Therefore, MDWs living in with their employer have more have depression symptom and in line with study on MDWs in Argentina found working conditions differ substantially between live-in and live-out workers, with living in the employer’s house being a predictor of poor general health and psychological (Bauleo et al., 2018).

No communication to the family, love relationship and stigma as domestic workers are cause factor of Indonesian domestic workers’ depression. The quality of Indonesian migrant workers life is low because they have discrimination from the local (Iqbal, 2016). A good social support has been recognized to shield people from mental, physical challenges such as depression (Grav et al., 2012; Hou et al., 2015; Westdahl et al., 2007). Study on MDWs in Singapore found social connections to be positively associated with the quality of life, and acceptance of working management style was positively associated with physical health, psychological health and environmental quality of life (Anjara et al., 2017). Social support from friends or peers was positively association (Mendoza et al., 2017). Using online community empower MDWs enhancing their psychological wellbeing (Wijaya et al., 2018).

Lack of religious activity is cause factor of Indonesian domestic workers. Religious aspects are central for Indonesian life (Rochmawaty et al., 2018). Therefore, study on resilience Indonesian factory workers in Malaysia found religious activity is one their resilience factors (Purba E J and Abdullah, 2017). Having affectionate and mutual connection with others (family or social support) and God (religious activity) plays a vital role for MDWs’ capacity to survive depression and anxiety (Aroian et al., 1998; Badger & Collins-Joyce, 2000; Caplan & Caplan, 2000; Chou, 2009; Fagg et al., 2008; Hovey, 2000; Mulvaney-Day, Alegria, and Sribney, 2007; van der Ham et al., 2014).

Low education level minimise experience and the lack of skills are associate factor of depression among Indonesian domestic workers. Level education also will impact learning ability of a new languages and cause hardships to adjust to the new life in new country (Chen et al., 2012; Ladin et al., 2009), while some other studies found no effect (Hou et al., 2015). Study on domestic workers in Singapore highlighted the need for more physical rest, social support and caregiver training on behavioural management for migrant domestic workers (Heng et al., 2018). Therefore, Indonesian domestic workers before they are sent to other country must have training to enhance their ability and skills so that they have resilience traits to face their challenges in their job and have better jobs.

Conclusions

This study confirms that depression is common among Indonesian domestic workers in Malaysia according to Beck Depression Inventory (BDI). Three from five Indonesian domestic workers in Malaysia are having depression symptom. The associate factors of depression are: occupation, financial hardship, social support, and education. The awareness created through this study will enable proper government-to-government policy on Domestic Migrant Workers matters hence reducing depression rate and policy level intervention and implementation, is needed to improve working conditions, including minimum wages and regulation of working hours is recommended. It will as well contribute to the body of knowledge on depression of Indonesia domestic workers in a foreign country especially the counsellors and the social workers employed by the Indonesia embassies in all nations throughout the world.

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IMPACT OF INDIAN MUSLIM RESTAURANTS' HYGIENIC ATMOSPHERE ON DINERS' SATISFACTION: EXTENDING THE EXPECTATION DISCONFIRMATION THEORY

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ABSTRACT. Foodborne illness, as reported in the news, is a persistent public health problem in Malaysia. Reports have suggested that workers in Indian Muslim food eateries in the country were observed to be unhygienic during meal preparation – raising concerns on the consequence of such exposure to diners' overall health and well-being. Therefore, this study hopes to emphasize the determinants of diners' satisfaction towards Indian Muslim restaurants based on their experience and expectation. The Expectation Disconfirmation Theory primarily employed in this study with an interest in developing a good understanding of issues concerning hygienic foodservices. This study also helps to highlight the priority restaurant operators should put on both food and dining satisfaction. Food marketers who are interested in customer happiness and hygiene compliance at work should benefit from this body of knowledge on diners' satisfaction based on experience and expectation with restaurant atmospherics.

Keywords: *Restaurants, customer satisfaction, well-being, quality of life*

JEL Classification: L83, I310

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Introduction

As food outlets become accessible to everyone amidst a growing foodservice culture, researchers estimated about 64.1% of Malaysians to eat out eventually (Poulain, Tibère, Laporte, & Mognard, 2014). This is complemented by 24-hour restaurants, such as those owned by Muslims of Indian descent, known locally as "the mamak", that offer a varied range of dishes. At present, there are about 10,000 mamak restaurants in Malaysia (Joibi & Zainal, 2017), after growing 33% from 7,500 in 2012, with an annual contribution of RM8 billion to Malaysia's economy (Aziz, Musa, & Rahman, 2016). Mamak restaurants have been well recognised as the quintessential Malaysian foodservice, from the perspective of tourists.

Nevertheless, dirty premises go against the principle of value-based foodservice. In Malaysia, at least one violation was found during the inspection of 6,876 food premises in 2013, and 4,080 in 2014 (Rajendra, 2014). The common hygiene offences in Malaysia can be witnessed from the closure of food premises. For instance, about 124 food premises in Negeri Sembilan were forced to close down in 2016, while 737 notices under Section 32B of the Food Act 1983 was issued to outlet operators on various offences (Azizi, 2017). Also, food poisoning episode reported 51.6% surge in 2016, especially during festival season (Kannan, 2017). The National Consumer Complaints Centre (NCCC) reported that since 2006 (441 complaints received) to 2013 (821 complaints received), a total of 5,115 food safety-related complaints were launched. The volume of complaints rose 84% from the baseline of 441 complaints in 2006, to 812 in 2013. Additionally, a total of 1,230 complaints were lodged by consumer in 2014, with the increase of 51.5% from a total of 812 complaints received in 2013 (Yuen, 2016). Despite the growing number of formal complaints, there has been no dramatic decrease in public complaints. The Indian Muslim restaurants have come under limelight amid public uproar over unsanitary conditions of dining facilities, where statistics confirmed that 50% of food mishandling incidents took place in their restaurant chains (Masyita, Amalina, Saudi, Samsudin, & Rizman, 2017), the utmost concerns of sustainable development is an important concern, for business and society specifically people health sustainability is lacking (Salleh, Yusof, & Othman, 2017).

At this point of time, food safety within the Malaysian foodservice industry is at a level considered to be of concern and can severely affect the welfare of the country. Foodborne illnesses and closure of premises indicate that the threat of eating out may be looming among those with higher health risks. Recent findings further revealed improper storage of utensils and raw foods, unhygienic kitchen environment and poor food handling as the critical causes of foodborne outbreak in Malaysia (Ab Karim, Latip, Shukor, Rashid, Mohd, & Kamaludin, 2017).

The clean atmosphere of a food premise reflects its operator's commitment in complying with food safety standards (Fatimah, Boo, Sambasivan, & Salleh, 2011). Inappropriate and unhygienic handling of food could influence the overall ambiance of the restaurant and bring potential health hazards, which in turn directly affect diners' satisfaction. According to Worsfold (2006), diners are relying on the atmospherics to judge the hygiene standards of premises.

Past studies on food safety were found to confine the term "hygiene" merely to the food (Chan, Hassan, & Boo, 2014). Diners fundamentally interact with the various atmospheric clues of the premise, not only with the meals. Such multiple clues are deemed to possibly cause hygiene issues, which then expose the diners to health risks. Accordingly, restaurant hygiene assessment merely based on food factor is not comprehensive, as foodservice covers a complex restaurant operation that involves the combination of hardware and software atmospheric values in delivering the dining experience (Lim, Chye, Sulaiman, Suki, & Lee, 2016). It strongly signals that the atmospheric concept is related to diners' hygiene perception and expectation. Hence, all these sensible clues are important in foodservice industry the understanding to improve the situation toward people suitability will allow future improvements.

To date, little is known about the role of atmospheric food safety in Malaysia (Abdullahi et al., 2016). A distinct classification on the hygiene assessment and hence, the expectation by bringing various atmospheric attributes into account is a must, in order to resolve consumers' subjective or diverse expectations towards food safety issues. Understanding the role of atmospheric qualities would then be pre-requisite to influence the diners' satisfaction and eating experience. Therefore, within the pragmatism perspective of Indian Muslim restaurants in Malaysia, this study needs in some way to generate multiple rationalisations for diners' expectations and experiences triggered by ambiance, facility aesthetics, food quality and service staff.

Underlying Theories

Service Quality

DINESERVE, proposed by Stevens et al. (1995), adapted the SERVUAL model with the aim to assess service quality attributes that were related to consumers' perceptions and expectations. Most findings revealed that DINESERVE addressed five major factors – food quality, service quality, atmosphere, convenience and price – to gain the positive support of customers (Kim, Ng, & Kim, 2009). While both the DINESCAPE model (Ryu & Jang, 2008) and TANGSERV model (Raajpoot, 2002) were suitable for measuring upscale restaurant settings, they address some of the toughest consumer perceptions of food premises, without primary concern for service quality.

To close the literature gap on models, researchers seek to relate consumer satisfaction with evaluation of service quality attributes (what consumers expect) by comparing the services received against their expectations, instead of their overall predispositions. This concept provides a logical reference point to further extend the Expectation Disconfirmation Theory (EDT) by including the experience element.

Expectation Disconfirmation Theory

EDT is a popular theory frequently found in consumer satisfaction literature. It has been empirically examined and commonly applied in several research streams such as business management, hospitality and tourism, consumer research, marketing and retailing (Oh, Oh, Kim, & Kim, 2017) in order to study consumer satisfaction and repurchase intention (Ali, Kim, Li, & Jeon, 2016). EDT asserts that consumer satisfaction is driven from the perceived performance of goods or services and expectation, where satisfaction is an outcome that is formed after comparing perceived performance and pre-consumption expectation (Oliver, 1980). Additionally, EDT attributes consumer satisfaction by scale where the variation between post-purchase and pre-purchase expectation is calculated to measure the extent of disconfirmation and hence, it is treated as an indication of consumer satisfaction or dissatisfaction (Lewin, Biemans, & Ulaga, 2010). The concept of expectation disconfirmation is capable of highlighting the predictive expectation of consumers towards service quality attributes.

Expectation

Expectation has been defined as the individual belief about a product attribute performance (Spreng & Page, 2001), besides focusing on the comparison standard that is formed by the consumers themselves. These anticipated comparative standards functioned as the underlying baseline of reference where consumers compare the actual consumption experience (Szymanski & Henard, 2001).

Perceived Performance

Perceived performance is defined as the consumers' perception of how a product or service performance meets their needs, wants and desires. This would also mean it focuses on the consumers' overall estimated judgment and evaluation of the performance of service providers (Schmitt, 2010).

Experience

Satisfaction assessment seeks to understand the reason why consumers seek good experiences (Yu, Li, & Jai, 2017). It is important to be precise about how consumer experience begins before the consumer engagement journey kick-off. Consumer experiences could be (1) interactive in nature, (2) subject to individual, (3) input of touchpoints, and (4) influenced by human five senses.

Consumer experience looks into the consumer journey and the impact of each touchpoint that consumers are experiencing. Scholars (Kranzbühler, Kleijnen, Morgan, & Teerling, 2017) argued that consumer satisfaction is affected by post-consumption experience, whereby consumers are influenced by stimulus during the interaction. According to Lemke, Clark, and Wilson (2010), the study of consumer experience should be highly context specific. Several scholars agreed with the direction of context specific to understand consumer experience (Calder, Isaac, & Malthouse, 2015).

Satisfaction

Debate of whether satisfaction is a process (cognitive evaluation) or an outcome (conative and emotion) exists in literature. Some researchers even argued that both cognitive and affective mechanisms are components of satisfaction (Ali, Ryu, & Hussain, 2016). Consumers will try to map their experience with their own belief or knowledge that has been embedded in their minds in determining their level of satisfaction. After that, the consumer will become committed and respond towards a goal in an explicitly way. As such, satisfaction is associated with the feelings developed by cognitive and emotional aspects of goods and services (Song & Qu, 2017). Without a doubt, consumer satisfaction will impact business profitability in the long term and has a role that is just as vital in ensuring customer retention (Pizam, Pizam, Shapoval, Shapoval, Ellis, & Ellis, 2016).

Disconfirmation

Definitions of 'disconfirmation' abound and one definition offered by Oliver (1980) is the discrepancy between expectations and performance. These two important variables – expectations and performance – posit greater influencing power in consumer judgments (Huang, 2015).

Operationalisation of Research Variable

Diners' satisfaction

Satisfaction is transaction specific, and it requires the assessment of consumer experience to arrive at satisfaction (Saad Andaleeb & Conway, 2006). Besides, satisfaction reflects a consumer's experience and service evaluation (Ramanathan et al., 2016). And therefore, it could be manifested, which consumers have made explicit in their comparison between expectations and performance. The consumer is likely to be aware of the outcome of this evaluation, or latent satisfaction with no explicit comparison. Thus, the consumer may not likely be fully aware of his satisfaction. That said, this study measures satisfaction in a pragmatic way or a manifest satisfaction approach.

Hygiene in Foodservice

Hygiene is defined as an action-oriented, systematic control principle to preserve health (Saad, Toh and Adil, 2013). Park, Almanza, Miao, Sydnor and Jang (2016) found that the sanitation aspect of food handling, dining room experience, the exterior, wash room and employees provoked 69 negative emotion responses in a full-service restaurant, if they were not handled appropriately. While Lianou and Sofos (2007) argued that physical environment is the potential channel that transmits diseases to consumers, the new classification of restaurant attributes considered cleanliness and hygiene only as part of the restaurant facilities, instead of across all other attributes in the premises (Longart, Wickens & Bakir, 2018).

Hygiene Experience

Chen and Chen (2010) defined consumer experience as the psychological consequence from consumer participation in tourism activities. Yoo, McKercher and Mena, (2004) studied consumer experience in business management perspective and had defined it as the perceived judgment about the excellence or superiority of the consumer experience within the scope of restaurant atmosphere. Turley and Milliman (2000) on the other hand, defined consumer experience as the post-dining evaluation influenced by the physical environment factors, otherwise known as the atmospherics. These definitions tie in to the discovery of touch points that stimulate consumers to form their overall experience through elements within and outside the control of food operators.

This study seeks to understand diners' satisfaction by bridging the gap between satisfaction that solely depends on general expectation and expectation disconfirmation paradigm. It is believed that the findings will be more convincing and coherent through the consideration of hygiene experience that is also characterised as the dining satisfaction. Experience in this study is therefore about the ongoing perceptions and feelings resulting in direct observation from restaurant dining environment; which will lead to pragmatic and learned experiences. Gentile et al. (2007) regarded pragmatic experience as the participation of doing something (experience gained through physical interactions).

As consumer experience is pragmatic in nature, hygiene experience will be the factor in making dine-out decisions and selection of restaurants (Aksoydan, 2007), which likewise contributed to diners' satisfaction (Almohaimmeed, 2017). Therefore, hygiene experience is beyond service quality and also a factor that contributes to dissatisfaction over the absence of proper hygiene experience in the food premises. In this aspect, cautious attention is needed to avoid consumer dissatisfaction.

Hygiene Expectation

Park, Almanza, Miao, Sydnor and Jang (2016), who found that the sanitation aspect in a full-service restaurant could invoke emotional responses, provided the foodservice industry with a unique insight into diners' hygiene expectation of all the touch points in a restaurant. Much of the term 'expectation' is defined as the individual belief about a product attribute performance, coupled with the summation of belief (Spreng & Page, 2001). Another definition focuses on the comparison standard that is formed by the consumers' themselves. Devlin, Gwynne, and Ennew (2002) defined expectation as what consumers feel they should be receiving.

Physical Environment of Restaurant

The physical environment is an essential service attribute, as it made up of various atmospherics. Patrons are stimulated upon entering the premises and will start to sort, judge and decipher all the information that's there. Scholars agreed that properly planned atmospherics can foster a pleasant consumer experience (Jain, Aagja, & Bagdare, 2017) because the objective physical factors are easy to control. Therefore, diners' satisfaction is based on how well the food operators can rise to meet their expectations. Today's foodservice sector is forced to rise up to the challenge of managing diners' expectations successfully. These challenges include the common staging of positive engagement by manipulating the restaurant physical environment and assessing diners' expectations before, during and after the consumption process. Undeniably, the combined components of expectation and experience will ultimately determine diners' satisfaction.

Restaurant Ambiance

Kotler (1973) said ambience is the conscious development of space that stimulates human emotion and improves purchase probability. Generally, ambiance is described as the environment that impacts behavioral intention and developed by lighting, music, colors, visual communication and others to influence customer's perceptions and emotions (Gowrishankkar, 2017). Researchers have agreed to define ambience as the controllable tangible factor that influences people's cognitive and affective mechanisms. Given the above definitions, ambiance is directly observable from the arrangement of space and the manipulation of various less tangible atmospherics like the background characteristics of the food premises (Baker, 1986).

Basic expectations associated with different types of food premises are underlying, often determinants that significantly influence customer expectation. For instance, fine dining restaurants equipped with dim lights and soft music are expected to be relaxing versus fast food joints (Wansink & van Ittersum, 2012). These assumptions are central to the foodservice culture and so ingrained that companies use different ambient properties (music, fragrance, temperature, and lighting) to create a restaurant concept based on consumers' hygiene expectation.

Arora and Singer (2006) found that coffee drinkers would stay longer in Starbucks if the outlet provides a comfortable and relaxing ambiance. Consumers are motivated to sit at bars under a conviviality and festivity ambiance (Jacob, 2006). These principles describe that consumers expect a hygienic environment that generates a relaxing and comfortable experience. Also, an interesting study reported that people form flavour expectations through sniffing (Spence, 2017) and therefore, foodservice provides must take the initiative to go above and beyond their job scope to eliminate bad smells on the premises. In many ways, consumer expectation allows companies the freedom to own their work and shine.

Hygiene experience is created when a customer interacts with different elements created by the service provider in a service environment. For instance, it is important to have the right balance of lighting and temperature in a service. Gowrishankkar (2017) reinforced this proposition by examining shopping ambience attributes. He found that music, odor, cleanliness, lighting, temperature, layout and store displays could enhance customer's shopping experience. Kim and Shin (2017) claimed that the human olfactory area responds to ambient aroma, after discovering that a scented environment did impact consumers' emotional state and experience.

Hypothesis1a: Restaurant ambience positively affects diners' satisfaction.

Hypothesis1b: Restaurant ambience positively affects diners' hygiene expectation.

Hypothesis1c: Restaurant ambience positively affects diners' hygiene experience.

Hypothesis1d: Restaurant ambience affects diners' satisfaction through a positive hygiene experience and expectation.

Facility Aesthetics

Facility aesthetics refer to the purpose of architectural and interior design and also décor, which contribute to the pleasant appearance of the servicescape (Wakefield & Blodgett, 1999). Internal items such as room colors and decorations on restaurant walls can impact people's decision to dine out (Josiam & Monteiro, 2004). In most of today's restaurants, furniture and table settings are part of the facility aesthetics (Heung & Gu, 2012). Unique facility aesthetics form a real competitive advantage for service providers to drive traffic and retain customers (Ryu & Han, 2011). Facility aesthetics can be achieved by structured design planning with the manipulation of color scheme, music type, and space.

Aesthetic quality of the environment can influence people's attitudes, behavior and well-being (Ariffin, Bibon, & Raja Abdullah, 2017). Salim (2017) revealed that more and more food court designs in shopping mall are increasingly drawing on attractive designs for customer satisfaction. The physical environment value, in other words the space design, fuels the desire for instant gratification (Lee, Wang, & Cai, 2015). As a result, Ryu and Jang (2008) said facility aesthetics have become a significant antecedent of customers' pleasure, arousal and behavioral intention in an upscale restaurant.

Due to the high prices of their meals, customers expect comfort, with decoration and optimum cleanliness in luxurious restaurants (Seyed Alireza Mosavi, 2012). The use of stunning facility aesthetics also plays an integral role in behavioral change. For instance, authenticity seekers are expecting to dine in an atmosphere consisting of authentic décor (Lin, Ren, & Chen, 2017). More important is the consistent best-level maintenance of facility aesthetics to bolster customers' perceptions. That said, a stunningly designed chair that leaves a stain on the diner's suit has to be regularly checked upon.

Restaurants need to adopt more stringent basic checks on cleanliness as a vital element in preserving style and identity (Alonso & Oneill, 2010). Early identification of detracts and dust forming on furniture and fixtures may prevent diners from being exposed to allergens and feeling emotionally turned off by the facilities surrounding them. There is also a greater need to understand that tableware such as plates and cups can influence customer food experience. Researchers found that the difference in plate colors will enhance perceived flavor intensity for the same meal. However, it was found that the shape of the plate does not have an impact on flavor intensity (Pecotić, Bazdan, & Samardžija, 2014).

Despite being educated on quality food servicing; operators might view facility aesthetics as innocuous to diners' hygiene experience. When it reality, they do play a role in creating a positive hygiene experience and expectation. Interior designer Godwin (1833-1886) advocated the awareness by incorporating hygiene in his designs to foster a healthy life (Hayes, 2017). History has proven that aesthetic factors could infuse elements of well-being in a humanistic sense. For instance, hygiene and sterility are emphasized through white color schemes (ivory, oyster, cream, and pure white) and highlighted by the use of the color in kitchens and restrooms (Haller, 2017). Wardono, Hibino, and Koyama (2017) revealed that consumers' social behavior are influenced by the restaurant's wide-ranging decorations. Along with satisfied taste buds, diners' ultimate expectation hinges on the color schemes and lightings as well.

Hypothesis2a: Restaurant facility aesthetics positively affect diners' satisfaction.

Hypothesis2b: Restaurant facility aesthetics positively affect diners' hygiene expectation.

Hypothesis2c: Restaurant facility aesthetics positively affect diners' hygiene experience.

Hypothesis2d: Restaurant facility aesthetics positively affect diners' satisfaction through hygiene experience and expectation.

Food quality

The key to quality food and beverages is taste, freshness and temperature (Wall & Berry, 2007), which can all influence consumers' perceived service quality and satisfaction (Garg & Amelia, 2016). Lim (2010) pointed out that better taste does not necessarily equal to better quality. Quality food actually depends on preferences. Consumers are in a time where they are willing to pay for quality foods that not only provide nutrition to the body but high satisfaction. Nevertheless, food quality attributes are being used in different segments as an indication of excellence. For instance, Boo (2017) exposed reliable criteria that covered fine dining, fast food and food court, whereas Line, Hanks and Kim's (2016) study focused on full-service restaurants that comprised additional attributes such as food temperature and food presentation. A study by Lin, Liu, Chang and Cheng (2015) on the quality of food being served in casual restaurants encompassed visual appeal, taste, cooking and hygiene attributes. Note that quality is more impactful than quantity in making sure consumers are served well, as they are willing to pay more for quality.

Food providers must get the message that quality is the basic criteria in a food-related business, and understand its importance as the most influential factor (Bufquin, DiPietro, & Partlow, 2016) towards customer satisfaction and behavioral intention. Consumers essentially want original or local ingredients to be used in an authentic restaurant, likewise expecting higher quality ingredients and better food presentation in an upscale restaurant to conclude their dining satisfaction (de Vries & Go, 2017).

Food has a significant and positive influence on consumer satisfaction (Almohaimmeed, 2017). For those who love to dine in a full-service restaurant, food quality influences their satisfaction levels among the physical setting and the services provided in the restaurant (Sulek & Hensley, 2004). Likewise, a study by Estepa, Shanklin and Back (2005) revealed that cleanliness significantly affects the perception of food quality and satisfaction. Grunert (2005) on the other hand, found that consumers posit expectation on both food quality and safety. The relevance of food quality expectation is supported by Baltescu and Boscor (2016) who discovered that the need for quality accounted for 36%; variety of the menu - 23%; atmosphere - 21%; location - 11% and following prices - 9%. These striking results were from the study of ethnic restaurant selection criteria, while more prior studies have noted the importance of food premises setting. The acceptability of food quality is a precise mechanism that stimulates through premises environment as expectation in food quality (Cardello, 1995). Thereby, the expectation on the food quality varies according to the type of food premises, for example, family restaurant, fast food, fine-dining restaurant, thematic restaurant and a few others. Consequently, food quality accounted for higher proportion of expectation in the dining journey. Yu, Luo, and Zhu (2018) confirmed the impact that food presentation, variety and freshness have on the expectation of food quality.

Delwiche (2004) suggested that temperature could be the determinant that enhances pleasure in the food dining experience, as it enables people to interact with other sensory properties (taste, smell and sight). Undeniably, how people perceive flavour of food is largely driven by the visual display of food, which can significantly affect both a person's expectations and subsequent experience with a dish (Michel, Velasco, Fraemohs, & Spence, 2015). As things stand, scholars (Canny, 2014) revealed that dining experience attributes have influenced customer satisfaction and behavioral intentions over the years.

Jalilvand et al., (2017) who studied dining experience context, found that consumers were indeed satisfied with good food quality factors. Not surprisingly, nutritionally balanced meals, organic ingredients, healthy cooking methods, nutritional information have also influenced customer satisfaction (Kim, Park, Kim & Ryu, 2013). The emergence of dining experience is upmost influenced by the tangible attributes of quality food within the service environment (Bujisic, Hutchinson & Parsa, 2014).

Hypothesis3a: Restaurant food quality positively affects diners' satisfaction.

Hypothesis3b: Restaurant food quality positively affects diners' hygiene expectation.

Hypothesis3c: Restaurant food quality positively affects diners' hygiene experience.

Hypothesis3d: Restaurant food quality positively affects diners' satisfaction through hygiene experience and expectation.

Service Staff

Consumers will judge service quality based on the abilities, attitudes and behaviors of employees (Arroyo-López, Cárcamo-Solís, Álvarez-Castañón, & Guzmán-López, 2017). According to Voon (2011), human service is the key antecedent of customer satisfaction and loyalty in the restaurant. Findings by Scanlan and McPhail (2000) showed that within the hospitality industry, travellers enjoy conversation and interaction with familiar servers, with Grandey et al. (2005) proving that staffs' friendliness and smiling faces could affect patrons' first impression towards service quality (Andrzejewski & Mooney, 2016). Other human factors such as neatly dressed staffs that are equipped with sterile gloves and hair caps, as well as knowledge on food safety were found to be the determinants of satisfaction (Voon et al., 2013). Garg and Amelia (2016) elevated the human factor after discovering that the tone of voice and body language of staffs have a strong influence on consumers' first impressions. The human factor will most likely be responsible for the creation of a healthier environment as foodborne illnesses can be caused by employees' unhygienic practices (Todd, Greig, Bartleson, & Michaels, 2007). Perez and Manzano (2017) have recognized employees' contribution to restaurant food safety and sanitary practices, mainly for influencing consumer perceived hygiene quality and satisfaction.

A clean-looking service personnel is a powerful figure, and can be the reason people choose to dine out (Aksoydan, 2007). As much as consumers value a clean restaurant (Choi, Almanza, Nelson, Neal, & Sirsat, 2014), they are appreciative of the basic grooming skills of servers such as keeping nails, clothes, and hair in clean condition – more so than functional aspects like communication skills and knowledge about ingredients (Alhelalat et al., 2017). Heuristically, the personal hygiene of service personnel fulfills diners' satisfaction. Hence, it is an important determinant of optimum satisfaction when expectation is being met. Besides, general uncleanliness distorts the consumer experience (d'Astous, 2000). Stein and Ramaseshan (2016) found that employees' interaction with customers is a touch-point that impacts the consumer experience. In optimising the co-creation of dining experience, service staff needs to embrace personal hygiene excellence and carefully monitor their interaction with diners at each touch-point.

Hypothesis4a: Restaurant service staff positively affects diners' satisfaction.
Hypothesis4b: Restaurant service staff positively affects diners' hygiene expectation.
Hypothesis4c: Restaurant service staff positively affects diners' hygiene experience.
Hypothesis4d: Restaurant service staff positively affects diners' satisfaction through hygiene experience and expectation.

Proposed Research Model

The conceptual framework (Figure 1.1) firstly examines the causal relationship between the atmospheric variables (ambience, facility aesthetics, food quality and service staff) and the influence of expectation, experience and satisfaction. Each atmospheric variable is assumed to influence hygiene expectation, hygiene experience and dining satisfaction. Meanwhile, the dining satisfaction is affected through hygiene expectation and hygiene experience. Delving further, a qualitative enquiry in the second phase aims to better understand dining satisfaction beyond its development via hygiene expectation and hygiene experience.

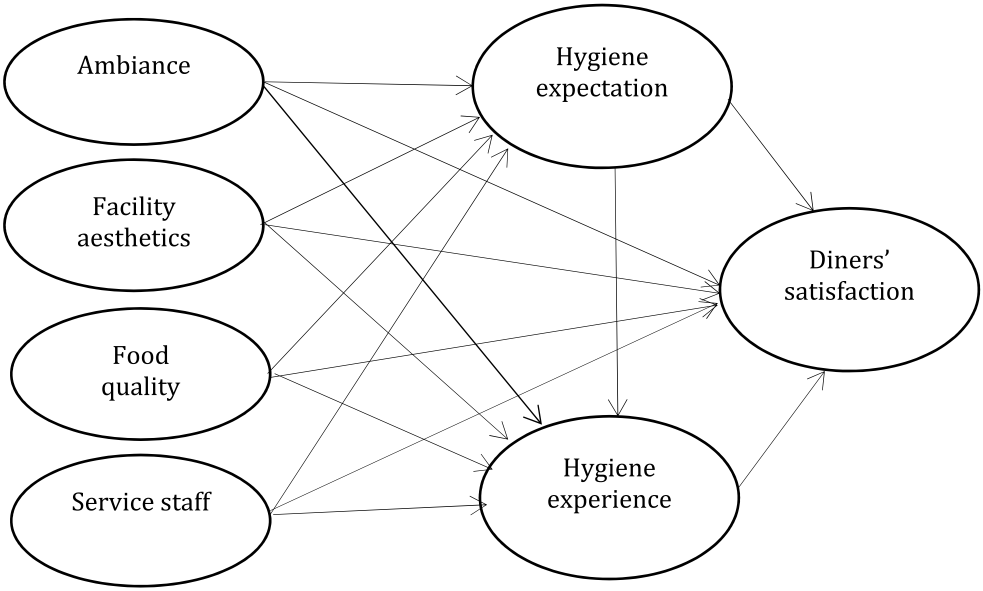

Figure: 1.1. Conceptual framework
Source: Authors' own study

Research Significance

Under the consumer expectancy disconfirmation model, the term "consumer expectation" seems to appear across varying perspectives, largely due to the lack of clear definitions. One is that consumers might use multiple types of expectations in post-service evaluations; hence the value perceived by them might deviate from the intended meaning. Satisfaction is often treated as a static variable where direct or indirect influence of satisfaction is taken on. To avoid any misinterpretations, this study focuses on defining expectation within the scope of hygiene experience. The study respondents were aware of this.

A precise definition of expectation is very important; in order to ascertain its association with consumer satisfaction. This study views satisfaction as a dynamic variable, while the combination of expectation and experience influence satisfaction. Another feature of this study is to shed the light on the term 'diners' hygiene expectation', while documenting that the originally perceived performance is superseded with actual consumer experience. The actual performance is unique and capable of providing insights into the whole consumer consumption experience.

Experiences are distinct from perceived performance, where the latter is based on the general evaluative judgments about a product or brand (i.e. "I like the restaurant", "I like this brand"). Experience on the other hand, extends to bordering aspects that include human sensations, feelings, cognitions and reactions towards a triggered environment (Schmitt, 2010). Thus, this study introduces and validates a new construct, which is "hygiene experience", in order to continue the exploration of consumer satisfaction with a mix-method approach based on underlying theories.

Significantly, this study also aims to contribute to halal food literacy by providing insights into the hygiene conditions of Indian Muslim restaurants. The mamak restaurant chains are reaping bountiful rewards for being a crucial halal foodservice providers in Malaysia, an Islamic country populated by more than 60% of local Muslims, besides hosting a massive number of inbound foreign Muslim tourists every year. What better way to capture that market space than to conduct studies that will help drive the mamak restaurants to the next level? This study may strengthen the efficiency of Indian Muslim restaurant operators and improve diners' satisfaction at the same time.

Conclusion

Foodservice providers must be reminded that foodborne illnesses can put diners' loyalty at risk. The quality of Indian Muslim restaurants has been below expectation, with repeated allegations of hygiene violations year after year. To add salt to the wound, news reports confirmed that the Indian Muslim restaurants in Malaysia are ranked rather poorly by patrons because of unhygienic dining environments, dirty utensils, unprofessional service staffs and improper handling of food. This means that the mamak food operators need to re-skill themselves; otherwise consumer involvements are required to improve the foodborne illness preventive system. In addition, a study to further look into the importance of hygiene in determining diners' satisfaction using the expectancy-disconfirmation paradigm, could help alert restaurant operators of the impact diners' satisfaction has on their business.

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IMPACT OF NATIONAL CULTURE ON PUPILS PISA RESULTS: THE CASE OF EUROPEAN COUNTRIES

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ABSTRACT. Objective: This paper aims at finding out whether the national cultural dimensions affect the quality of European education systems. The research question therefore focuses on whether and how large is the impact of national cultural dimensions on pupils' results measured by PISA results. **Methodology:** We used data on the national cultural dimensions from the GLOBE project and we used the PISA results for pupils' results. We did Structural Equation Model (SEM) for our empirical analysis. This model was preferred because it helped to establish the causal relationship between the cultural dimensions and pupil's performance. **Results:** Our results have demonstrated that: pupils' performance are influenced by some national cultural dimensions. PISA results correlate negatively with the cultural dimension values of Uncertainty Avoidance and Future Orientation, on the other hand PISA results positively correlate with performance Orientation values and Assertiveness values. **Implication**: This research presents and elucidates significant cultural factors that affect pupils' results. It gives an impulse to understanding the cultural formulas that apply in the learning process. This knowledge allows for the appropriate and timely implementation of effective learning methods that have a positive impact on pupils' results.

Keywords: *Pupils' results, national cultural dimensions, culture, quality of education*

JEL Code: *I21, I24, I29*

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Introduction

Culture is a very difficult word to define although it is a familiar word for everybody. Young (1983) admits that culture is one of the two or three most complicated words in the English language. Culture can be defined broadly as well as narrowly. Geertz (1973, p. 45) suggests that culture is "… historically transmitted pattern of meanings embodied in symbols, a system of inherited conceptions expressed in symbolic form by means of which people communicate, perpetuate, and develop their knowledge about attitudes toward life". Hofstede (2001, p. 12) defines culture as "… the collective programming of the mind which distinguishes the members of one group or category of people from another". Furthermore, Hofstede argues that the core element of any culture is its values. He further defines values as broad tendencies to prefer certain states of affairs over others. The value tradition (Hofstede, 1980; Schwartz, 1994; Triandis, 1995) sees culture as a shared set of core values that regulate behavior in a population. Recently, several cultural psychologists have adopted other conceptions of culture - that of culture as "knowledge structure" (Chiu et al., 2000; Hong et al., 2000; Peng, Ames & Knowles, 2001; Peng & Nisbett, 1999). This approach portrays culture as a constellation of knowledge structures, or folk theories, that embody individuals' basic beliefs about the world and guide inferences in different domains.

Traditional cultures discourage individual' ambition in education and work. Exploring the relationship between national culture and student learning was dealt with by (Dumont & Wax, 1971; Planel, 1997; Peng & Knowles, 2003), Eldridge & Cranston, 2009; Dennehy, 2015; Choy et al., 2015; Sørensen et al., 2016). This relationship appears to be significant and it is important to understand the behavior of actors in educational systems shaped by national cultures and the potential impact of culture on education.

The aim of this paper is to find out whether national cultural dimensions affect the quality of European education systems measured by PISA results. We formulated the research question as to whether and how large is the impact of national cultural dimensions on pupils' results measured by PISA results.

Pupils' results as an indicator of quality of education

The quality of education has been a frequently debated topic in recent years. Opinions about what constitutes the quality of education and how best to express it differs among authors. One of the first authors to study the quality of education was Barro (1991). He approximated the quality of education in growth models using the ratio of the number of pupils to teachers. It is based on the hypothesis that the more children come to the teacher, the lesser the quality of teaching the teacher is able to provide. Quality enters the model as an independent variable and shows a negative relationship with growth for primary education. However, for the same variable for secondary education, the results are not statistically significant. Barro and other authors (Mankiw, Romer & Weil, 1992; Levine & Renelt, 1992; Pritchett, 2001) perceive the quality of education rather from a quantitative point of view. According to them, quality of education is influenced by the number of pupils per teacher, or by the average number of years of school attendance. Other authors who measured the quality of education by quantitative indicators include Mazouch & Fischer (2011). These economists dealt with the calculation of the educational potential of a society (EPS). In this method, coefficients are assigned to individual degrees of study, which are then aggregated into one value of the EPS coefficient by weighing according to the relative representation of individual groups. Another method used by these authors is the average length of education (ALE), i.e. the standard number of years required to reach a certain level of education in individual countries. However, it is criticized by the abovementioned authors for the fact that they operate with a small number of relevant parameters that cannot capture the characteristics of formal education as a whole (Průcha, 2018).

There are other views on the quality of education that are in the opposition against the views outlined above. Card & Krueger (1996) and Hanushek & Woessmann (2012) consider the quantitative concept of quality to be inaccurate and prefer a qualitative concept. These authors claim that students' knowledge and cognitive skills are a benchmark for assessing the quality of education. This knowledge is measured using standardized tests (PISA, TIMSS, or PIRLS). Hanushek (1997) argues that the influence of class size or the number of pupils on teachers on learning outcomes is small or not. He states that the acquired knowledge and skills of people predestine economic growth in the long term. He further states that"… the results of tests from the international comparison of 15-year-old called PISA do not only tell us what the results of education are attained by children in schools, but they also predict how high-quality workers will be in their adulthood" (Kartous, 2014).

PISA (Programme for International Student Assessment) is the most significant study that measures and compares the cognitive skills of pupils in education systems. The PISA project is one of the activities of the Organization for Economic Co-operation and Development (OECD). The aim of this program is to evaluate education systems around the world (member countries, but also some OECD non-member countries) by testing the skills and knowledge of 15-year-old pupils (at the end of their compulsory education) in three basic subjects - science, reading and mathematics. This project applies the unified form and content of tests in different countries, so it provides the basis for credible comparison and evaluation of education systems. Hanushek & Woessmann (2012) use their research results only in the fields of science and mathematics, because in an international comparison, identifying a common set of competencies for these subjects is easier than reading. It should be emphasized that the results in mathematics and science are highly correlated with the results of reading tests and therefore omission of reading tests does not distort the results of the analysis. PISA results are among the most objective indicators of education quality at present. Janoušková & Maršák (2008) state that this indicator, which is set at the international level, is often a very important impetus for discussions concerning pupils' educational outcomes and which clearly show the interconnection of the educational, economic and political subsystem. Table 1 lists the PISA results for 2015 in the European OECD countries in which our analysis is conducted.

Table 1: PISA 2015 results

Country	Science	Mathematics	Average
Finland	531	511	521
Slovenia	513	510	511,5
Netherlands	509	512	510,5
Germany	509	506	507,5
Denmark	502	511	506,5
Ireland	503	504	503,5
Poland	501	504	502,5
Great Britain	509	492	500,5
Portugal	501	492	496,5
Austria	495	497	496
France	495	493	494
Sweden	493	494	493,5
Czech Republic	493	492	492,5
Spain	493	486	489,5
Italy	481	490	485,5
Hungary	477	477	477

Note: Countries are ranked from the highest average PISA score to the lowest.
Source: OECD (2016)

National culture

Culture is defined as a set of shared values, beliefs, and expected behaviors (Hofstede, 1980). Culture can be defined as those customary beliefs and values that ethnic, religious and social groups transmit fairly unchanged from generation to generation. Deeply embedded, unconscious, and even irrational shared values shape political institutions as well as social and technical systems, all of which simultaneously reflect and reinforce values and beliefs. It follows from these claims that cultural behavior is unchanging after a long time.

Hofstede (1980) and Hofstede & Bond (1988) identified five societal values that can be used to describe a country's national culture: Uncertainty Avoidance, Individualism, Power Distance, Masculinity and Confucian dynamism, later referred to as Long-term Orientation. Hofstede created ordinal scales for countries for each of these dimensions based on a standardized factor analysis of questionnaires administered between 1968 and 1972 to 88,000 national employees in more than 40 overseas subsidiaries of a major American corporation. Hofstede's work has proven valuable in that it presents a concise taxonomy of significant cultural dimensions for explaining the behavioral preferences of people not only in business organizations.

House et al. (2002) carried out a ten-year research program, known as GLOBE, to examine culture in terms of values and practices. Cultural values are acquired early in life and are the deepest and most enduring aspects of culture. Cultural practices, on the other hand, are the superficial rituals and norms. While practices may be reflections of cultural values, they are more subject to change. National cultures are examined in terms of nine dimensions: Performance Orientation, Future Orientation, Assertiveness, Power Distance, Humane Orientation, Institutional Collectivism, Uncertainty Avoidance, and Gender Egalitarianism. The methodology of this study is based on the methodology of Hofstede (1980) - six culture dimensions had their origins in the dimensions of culture identified by him. The proponents of the cultural dimensions approach introduced the practice of calculating scores on each dimension for each culture enabling relative ranking among them. These typologies and dimensions are especially useful in providing explanations when we encounter differences in outcomes that seem to originate from the differences in cultural values and practices. Researchers in variety of fields ranging from education to epidemiology have explored the potential impact of cultural variables on outcomes that vary from educational accomplishments to depression. The GLOBE project will set the standard for national cultural research well into the future because all aspects have been thoroughly researched, and the scope of the project is immense. It assessed 62 different countries and identified important cultural and leadership norms. Table 2 gives definitions of individual cultural dimensions.

Table 2: The national cultural dimensions

Dimension	Definition
Power Distance	The extent to which the members of a society expect power to be distributed equally. It reflects the degree to which a community maintains inequality among its members by the stratification of individuals and groups with respect to power, authority, prestige, status, wealth, and material possessions.
Uncertainty Avoidance	The extent to which individuals in a society rely on social norms, rules, and procedures to alleviate unpredictability of future events. It reflects the attempts of people to avoid vague situations by providing norms, values, and beliefs in a form of rules, laws and regulations.
Future Orientation	The extent to which individuals engage in future-oriented behaviours such as delaying gratification, planning and investing in the future. It reflects the degree to which a community places a higher priority on long term success, have a strong capability and willingness to imagine future contingencies, formulate future goals, and seek to achieve goals and develop strategies for meeting their future aspirations.
Institutional Collectivism	The degree to which organizational and societal institutional practices encourage and reward collective distribution of resources and collective action. It reflects the degree to which people in a community are integrated into strong cohesive groups, group goals take precedence over individual goals, people emphasize relatedness with a group, and individuals are likely to engage in group activities and make greater distinctions between in-groups and out-groups.
In-group Collectivism	The extent to which individuals express pride, loyalty, and cohesiveness in their organizations or families. It reflects the degree to which emphasis is on the family and pride for and loyalty to the organization.

Dimension	Definition
Humane Orientation	The degree to which a collective encourages and rewards individuals for being fair, altruistic, generous, caring, and kind to others. It reflects the extent to which people are tolerant of mistakes, friendly, sensitive, and value harmony.
Performance Orientation	The extent to which a collective encourages and rewards group members for performance improvement and excellence. It reflects the extent to which a society encourages and rewards innovation, high standard, and performance improvement.
Gender Egalitarianism	The extent to which a collective minimizes gender inequality. It reflects the extent to which a society seeks to minimize differences between the roles of females and males in homes, organizations, and communities.
Assertiveness	The degree to which individuals are assertive, confrontational, and aggressive in their relationships with others. It refers to the degree to which individuals in a society are assertive, tough, dominant, and aggressive in social relationships.

Source: House et al. (2002)

Methodology

We used the explanatory study approach for this study. The explanatory study determines the relationship between variables, meaning it allows to study situations, by trying to exam the relationship among variables. As shown in this study we aim to establish the relationships between cultural backgrounds (we used GLOBE's national cultural dimensions in terms of values) and how it influences student performance. Mostly, three approaches are employed to decide on investigating a problem in study; correlational, clarification, and causal. This study employed the causal investigation. Causal relationship elucidates how a variable causes changes in other concepts or variables (Bayat & Fox, 2007). We used the structural equation model (SEM) for our empirical analysis. This model was preferred for this study because we intend to analyze the structural relationship between measured variables and latent constructs. SEM combines multiple regression analysis and factor analysis, and this is the method of choice for estimating multiple and interrelated dependence in an analysis (Henseler, 2017; Van Riel et al., 2017). The SEM displays standardized regression coefficients (path coefficients) therefore it can be used to measure the relationships among latent variables. The model specification of the SEM partial least square is given by Zawojska (2010) as:

$$z_k = \beta_0^{(k)} + \sum \beta_i^{(k)} z_i + v_k$$

where:

z_k = explained variable (student performance – PISA results) (1)

$\beta_0^{(k)}$ = constant term

$\beta_i^{(k)}$ = regression coefficient

v_k = residual term.

Results and discussions

After performing the analysis, we obtained the following model (see Figure 1). We measured the model's internal consistency and reliability with the composite reliability, which is the recommended method to deal with reflective measurements (Hair et al., 2012). The composite reliability helps to estimate the reliability of the total scores relating to a reflective model. The composite reliability technique of Dillon-Goldstein's rho (or Jöreskog's rho) (ρc), is increasingly gaining popularity among researchers with minimum values of 0.70 indicating acceptable reliability, with the maximum threshold of 1 (Henseler & Chin, 2010; Dijkstra & Henseler, 2015). The Dillon-Goldstein's rho does not assume all scale constituents are of equiproportional importance, because it uses factor loadings instead of the inter construct correlations, this makes it to be a more precise reliability measure (Vinzi et al., 2010). From Table 3 below, it is evidence that all our constructs achieved values greater than the minimum acceptable 0.7 threshold, since we had only single indicators for all our constructs.

Table 3: Construct Reliability Tests

Construct	Jöreskog's rho (ρc)
Uncertainty Avoidance	1.0000
Future Orientation	1.0000
Power Distance	1.0000
Institutional Collectivism	1.0000
Humane Orientation	1.0000
Performance Orientation	1.0000
In-group Collectivism	1.0000
Gender Egalitarianism	1.0000
Assertiveness	1.0000
PISA results	1.0000

Source: authors' processing

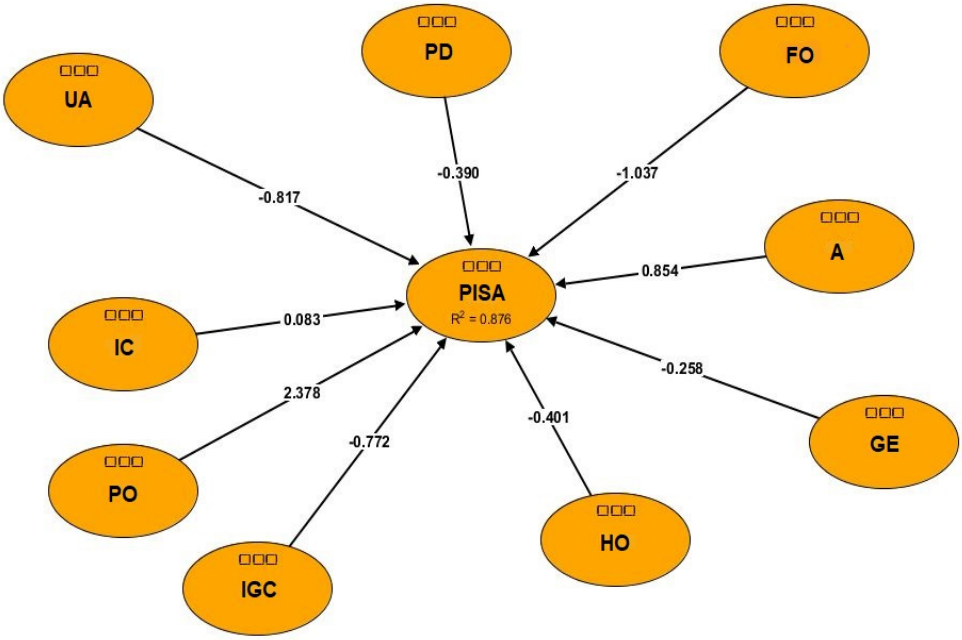

Figure 1: Results of model
Source: authors' processing

Legend: FO = Future Orientation, A = Assertiveness, GE = Gender Egalitarianism, HO = Humane Orientation, IGC = In-Group Collectivism, PO = Performance Orientation, IC = Institutional Collectivism, UA = Uncertainty Avoidance, PD = Power Distance

In this model, we can see Beta values for individual cultural dimensions, which are also listed in Table 4. According to R-squared, statistically significant cultural dimensions predict the PISA results by 88 %.

Table 4: Regression analysis results

Variables	Beta	Std Er	P values
Uncertainty Avoidance	-0.817	7.538	0.055*
Future Orientation	-1.037	7.210	0.058*
Power Distance	-0.390	9.616	0.408
Institutional Collectivism	0.083	6.054	0.741
Human Orientation	-0.401	9.618	0.443
Performance Orientation	2.378	6.213	0.004***
In-group Collectivism	-0.772	10.083	0.114
Gender Egalitarianism	-0.258	7.940	0.391
Assertiveness	0.854	6.586	0.019**
(Constant)	616.629	76.156	0.000***

Source: authors' calculations
Legend: P < 0.05 (*); P < 0.01 (**), and P < 0.001 (***)

Regression coefficients show that there are significant positive correlations between the PISA results and the national culture values of Performance Orientation (β = 2.378) and Assertiveness (β = 0.854). Conversely, there was a significant but negative correlations between the PISA results and the national culture values are for Uncertainty Avoidance (β = -0.817), and Future Orientation (β = -1.037). For these two cases, however, the significance is lower.

The results in Table 4 show that high performance orientation is positively associated with PISA results. This implies that high performance-oriented societies tend to value those individuals and groups who produce results and accomplish their assignments (House et al., 2002). They believe that schooling and education are critical for success, value training and development, emphasize results more than people, value competitiveness, and value taking initiative. They are expected to be rich in human capital and have individuals that are better educated and developed than do low performance-oriented societies. In addition, societies with high performance orientation practices are economically more successful and globally more competitive than their counterparts with low performance orientation practices. The societies that are less performance-oriented focus on maintenance of tradition, family, affiliation and social ties than on individual achievement. They value one's role and position in society. In communication, they prefer subtlety and pay attention to context (House et al., 2004). Such an attitude may favor concrete experience. Such an attitude may favor less action and demand more reflection from the members of those societies. Countries with high performance orientation are Slovenia, Poland, or Finland.

Our results also support the assertion that there is a statistically significant and positive relationship between assertiveness and PISA results. Assertiveness is related to the nature of the relationship of individuals, groups, and societies with the outside world (Hartog & Dickson, 2004). Assertiveness implies the degree to which individuals in organizations or societies are assertive, confrontational and aggressive in social relationships (House et al., 2004). Countries with high assertiveness culture do well in global competitiveness, emphasize success, results and progress more than relationship between people. Societies that are low on assertiveness consider assertiveness unacceptable and endorse modesty and tenderness. They cherish people and relationships and are cooperative. They value self-possessed conduct. In communication, they are indirect (House et al., 2004). They have a more 'being' orientation than 'doing'. In learning, they may be more attuned towards using reflection than action. Countries with high assertiveness are Slovenia, Czech Republic, Spain, or Ireland.

As shown in Table 4, there is a significant and negative association between uncertainty avoidance and PISA results. This implies that countries with low uncertainty avoidance culture tend to take more risks and are more tolerant of deviant behavior and innovative ideas (Hofstede, 1980). In addition, countries with high uncertainty avoidance perceive a need for rules and regulations, and, therefore, tend to be information-intensive. There is fear of failure and preference for tasks with sure outcomes, clear guidelines and less risk. Pupils from countries with a strong avoidance of uncertainty (Slovenia, Spain, Poland, or Italy) like structured lessons with clearly defined goals, detailed tasks and a fixed time schedule. They like learning situations with one correct answer and reward accuracy. They assume their teachers are able to answer all questions. Members with high uncertainty avoidance resort to abstract conceptualization and reflection and refrain from exposing themselves to new experiences and experiments while learning. Pupils from countries with low uncertainty avoidance are more tolerant of breaking rules, less resistant to change and innovation, and willing to take risks. They believe in one's ability to influence one's life and others. Children are encouraged to experience novel situations. In education, they prefer open-ended learning situations where there is room for sense of empiricism, relativity and original and unconventional ideas. The members of such societies may find it easier to learn from concrete experiences and active experimentation. Countries with low uncertainty avoidance are Netherland, or Sweden.

Furthermore, we also found that there is a significant but negative relationship between future orientation and PISA results. This means that societies with a high future orientation culture have organizations with a longer strategic orientation, have flexible and adoptive organizations and managers, place a higher priority on long term success, have a strong capability and willingness to imagine future contingencies, formulate future goals, and seek to achieve goals and develop strategies for meeting their future aspirations (House et al., 2002). Future orientation requires being flexible, open to taking risks and persistent. Future orientation thus fosters abstract conceptualization and active experimentation. Less future oriented societies are able to engage more in the present and enjoy the moment. They may show incapacity or unwillingness to plan to accomplish goals in the future. While planning, the thrust is to ensure that they are compatible with the customs and traditions. Only past experience can legitimate innovation and experience (House et al., 2004). Short-term orientation in society is reflected in the effort to achieve results quickly and to seek out pleasures and spending. Long-term culture members perceive goals over a longer time horizon, characterized by self-discipline, postponement of satisfaction, continued effort, with results coming later (Hofstede & Hofstede, 2005). Pupils in countries with a high index of future orientation attribute success to school efforts and the failure of its shortage, while students from countries with a low index of long-term orientation attribute success and failure to coincidence. Countries with low future orientation are Denmark or Sweden. Interestingly, countries with lower future orientation achieve better learning outcomes. Countries with low PISA results and high future orientation are Italy, Hungary, or Spain.

Contrary, our results have demonstrated that there is no relationship between the following cultural dimensions and PISA results (power distance, institutional collectivism, human orientation, in-group collectivism and gender egalitarianism). They all didn't influence pupils PISA results positively. These cultural dimensions described above are focused on performance, pupils' energetic behavior, or open-end learning that enhance student performance. However, other factors such as the relationships between the actors of learning, their human values, or the integrating of students into groups appear to be insignificant in influencing the learning outcomes.

Our findings are consistent with those reported by Sørensen et al. (2016), or Lopes (2017). These authors studied the educational outcomes of second-generation immigrants from different cultures, but who receive the same education and otherwise live in similar neighborhoods in their new country. This standard identification strategy allows to isolate the effect of culture from other influences. These authors for student performance also used PISA results and TIMSS (Trends in International Mathematics and Science Study) results. Also, according to their results, national cultural values play an important role in student achievement.

Conclusion

This research explored the influence of national culture on student performance. The above research question can be answered in the way that pupils' results measured by PISA results are influenced by some national cultural dimensions. While R-squared of these cultural dimensions predict the PISA results by a significant percentage -about 88. PISA results correlate negatively with the cultural dimension values of Uncertainty Avoidance and Future Orientation, on the other hand, the PISA results correlate positively with Performance Orientation values and Assertiveness values. We can state that, a higher student performance is associated with lower Uncertainty Avoidance, lower future orientation, higher Performance Orientation, and higher Assertiveness.

Therefore, cultural factors can influence the way an individual learns. Cultural patterns are extremely stable over time (Hofstede, 2001). Individuals in the culture undergo certain changes, but there are still residual cultural differences that modernization of a society cannot entirely wipe out. Although Hofstede (1984) has treated culture as something that is static, other researchers have suggested that it may be more fluid in nature. Osland & Bird (2000) warn against cultural stereotyping. They caution about the need for students to understand the complexities of their own culture and to use the various cultural stereotypes as basic tools to better understand themselves. If culture indeed plays a part in learning, it is necessary for students to make sense of their social environment and create an awareness of their own culture that would help them learn better deeply rooted cultural values and modes of thinking that are difficult to separate from learning processes (Nisbett & Masuda, 2003).

In any country, there are major cross-cutting differences according to ethnic group, social class, religion, region, age and gender. Nevertheless, it is maintained that despite such complexities and despite the similarities that exist between intercountry social characteristics, the intercountry differences are substantial and significant. They need to be defined and their potential role in learning needs to be examined. It is also argued that intercountry comparisons help to reveal national educational values, even when countries under comparison are as geographically close and as historically interconnected as some European OECD countries, which we have included in our research sample.

The limitation of our study may be the absence of purification of other influences that affect student performance (as performed e.g. aforementioned authors (Sørensen et al.,2016; Lopes 2017) - in order to isolate the effect of culture from those of institutions and markets and other economic factors and non-economic factors. However, it is clear from our previous research that, in particular, economic factors do not have a decisive impact on student performance in European OECD countries (Provazníková & Chlebounová, 2018).

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