LEIQ™ As An Emotion and Importance Model for QoL:
Fundamentals and Case Studies

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ABSTRACT

Past literature has increasingly highlighted the importance of understanding people's emotional responses towards the characteristics of everything that has points of interactions with the people. Ever since it was introduced, research relating the emotional responses to the economic power of industrial products, hospitality services, as well as employees' or peoples' productivity has been expanding. This paper presents a model called Lokman's Emotion and Importance Quadrant (LEIQ)™, which was built based on axes of emotion vs. importance, to investigate emotion and the importance of the influential factors of the emotion. The paper presents two case studies; i) Employee's Happiness, ii) Student's Well-being, with the implementation of LEIQ™ to showcase the process to discover the indicators that affect people's emotion, and its importance to the people in the effort to provide information to the leaders or management advocates for their strategic decision-making in ensuring well-being and Quality of Life (QoL). Both case studies have enabled the research to understand factors that affect Employee's Happiness and Student's Well-being, and how it is important to them. The effective use of this model could facilitate decision makers in an organisation, community, society, and even a nation at large to gain knowledge and devise correct strategies to boost people's well-being, promoting more positive emotion, and ultimately upsurge productivity and QoL of the people.

Keywords: *Emotion, human factors, Kansei, KJ method, quality of life (QoL).*

INTRODUCTION

Past studies have highlighted the importance of people's positive emotion and well-being at work and in their daily lives. Among factors that affect people's emotion are job or commitment related stress, amenities, and services surrounding their work and daily lives (Nilufar Ahsan, Zaini Abdullah, David Yong Gun Fie & Syed Shah Alam, 2009; Uchida, Norasakkunkit & Kitayama, 2004; Tsuchiya, Anitawati, Shamsiah & Fauziah, 2018). The studies suggested that positive to negative emotion affects people's well-being and Quality of Life (QoL). Uchida et al. (2004) defined happiness as 'high ratio of positive to negative feelings', and therefore, a positive and affective emotional and psychological state characterises people's well-being.

This paper presents fundamentals of a model called LEIQ™, which was developed to enable classification of emotion, the factors that contribute to the emotion, and their importance to the people who interact with the stimuli. LEIQ™ is an acronym for Lokman's Emotion and Importance Quadrant (LEIQ)™, marking the signature of the designer in the trademark. LEIQ™ is built based on axes of emotion vs. importance, to indicate the factors that contribute to people's emotional responses (feelings) and how much it is important to

them in their daily lives. The quadrant consists of 4 spaces indicating positive to negative emotion versus important to not important dimension.

This paper presents two case studies implementing the model in its investigation of emotion and well-being of a targeted group of people. Results from the case studies showed that the implementation of LEIQ™ has enabled the research to understand factors that affect people's emotion in different settings, and how important the factors are to the people. The result may be used to assist decision makers in strategising action plans to elevate QoL in a specific setting.

THEORETICAL REVIEW

Since Aristotle and Plato, there have been many arguments on how affect, or sometimes referred to as emotion, should be classified. While there are continuous discussions to describe emotion by scholars and philosophers in the psychology, social sciences, emotional research domain, and several others (Aristotle, 350 B.C.E.; Barros-Justo, Zapata & Martinez-Araujo, 2018; Damásio, 1980; Frijda, 1986; Ekman, 1999; Russell, 2003; Norman, 2004; Anitawati, 2013; Nagamachi & Anitawati, 2015), the emotional dimension addressed in this model refers to the affective state in response to both internal and external stimuli. Further discussion on affect/emotion follows in subsequent sections.

People and Emotion

Emotion is important as it is highly associated with the quality of daily human experience (Raymond, 2002). A few decades ago, Kleinginna and Kleinginna (1980) defined the emotion as "a complex set of interactions among subjective and objective factors, mediated by neural-hormonal systems. In their related work, they argued that it is theoretically difficult to define emotion as there are still many fallacies (Barros-Justo, Zapata & Martinez-Araujo, 2018), lack of knowledge, multiple perspectives of the definition of emotions among psychologists (Tamini & Chadha, 2018), and due to the complexity of emotional processes and states.

Positive emotions are processed through controlled and autonomous motivation (Wang, 2018). Emotion begins with an individual assessment of their meaning of some antecedent events. This appraisal process may be either conscious or unconscious, such as past experiences, physical expression, cognitive processing, and physiological changes. Hence, emotions are best conceptualised as multicomponent response tendencies that unfold over relatively short time spans (Clore, 1994). There have also been many attempts to categorise qualitatively the different types of emotions such as anger, fear and disgust.

Emotions are central components of people's lives, both interpersonally and intrapersonally. Hence, emotional experiences and responses could have powerful impacts on how people function, both positively and negatively. According to Kassam & Mendes (2013), causal analyses of past emotional experiences could have significant impact on current emotional states. For example, reflective reasoning of certain emotion can mitigate the negative effects of ongoing emotional experiences. Therefore, it would also affect the decision making on present and future situations.

Emotion Measurement

The quest for instruments to measure emotions has a long history. Traditionally, attempts to measure emotions have been done in the field of psychology and sociology. According to Norman (2003), acknowledging the important role of emotions in the field of research, consumer and marketing researchers have developed instruments which measure the

emotional responses to advertisement and consumer experiences. Moreover, he also stated that with the rapid invasion of computers into our daily lives, computer science has also become a player in the field of measurement of emotions.

For example, Product Emotion Measurement (PrEmo), is an instrument to assess emotional responses to consumer products, and it is used as the non-verbal measurement instrument as well. PrEmo was created as a tool that could be used to study the emotions elicited by different people on different products, across languages and cultures (Anitawati, Khairul Khalil & Ana, 2013; Norman, 2003). It uses 12 separate animations which consist of cartoon diagrams of emotional expression combining face, hands, body, and sound in short one second movies to measure the emotional responses elicited by consumer towards the studied products (Anitawati, 2019; Anitawati et al., 2013; Caidedo, 2009; Norman, 2003).

Other than that, in determining the success of a product design, it is essential to understand user satisfaction, as well as technical aspects, such as ergonomics, functionality and comfort because both are equally important (Shamsiah, Anitawati & Tsuchiya, 2016; Norman, 2004; Nagamachi, 1992; Green & Srinivasan, 1990; Akao, 1990). Therefore, Kansei Engineering (KE) is another instrument that can measure emotions, specifically to understand user satisfaction. "KE is a technology that unites *Kansei* into engineering realms in order to realise product that match consumer's need and desire" (Shamsiah, Anitawati & Tsuchiya, 2016; Anitawati, 2010). Moreover, it is a scientific discipline where the development of products that please and satisfy consumers are carried out technologically (Anitawati, 2010; Nagamachi, 1999). This is done by analysing consumer's *Kansei* and translates how the product design elicits this *Kansei.* Therefore, KE targets to improve human well-being by looking into physiological and psychological aspects that contribute to satisfaction (Anitawati, 2019; Anitawati, 2010).

According to Shamsiah (2016), in every means of assessment of emotion, core techniques ground the translation of the implicit emotion into verbal description. Whether it is the use of self-reporting technique, animation, facial expression and others, ultimate access to users' emotion is commonly guided by the use of emotional keywords (Anitawati, 2019; Shamsiah et al., 2016; Anitawati & Kamalia Azma, 2010). Shamsiah et al. (2016) stated that, in KE, these keywords are called Kansei Word (KW). For example, Shamsiah, Anitawati and Mokhtar (2018) used Evaluation Grid Method of Laddering to identify the political agenda videos that were posted on YouTube, which ultimately resulted in 64 emotions or KWs (positive and negative emotions) from video watching experienced from the subjects. The emotions or KWs developed by Shamsiah et al. (2018) could be used as a basis of understanding for future investigation into emotions, especially in political awareness.

Emotion and the Success of Products/Services

Emotion provides essential learning towards process of products (Fineman, 1997). Generally, a firm's ability to deal with emotions in the organisational context is more important especially in managing the resistance and anxiety (Vince, 2001), employees' feelings (Kagan, 1984) and expressive behaviour of employees (Fridja, Manstead & Bern, 2000). Marsha Richins (1997) had published the first attempt to relate emotions to the product experience in automobiles.

Previous research was done toward product emotions in respect of getting the emotion list and product emotion methods. There are three main appraisals can be done towards products as indicated by Schifferstein and Desmet (2010): (1) the aspiration-based

products encourage the customer objectives' accomplishment; (2) the pleasure-based products give delight; (3) the integrity-based products should meet or surpass the customer desires. Thus, completion design of product emotions is a highly competitive and potential differentiator in product design (Watson & McDonagh, 2004).

In more recent studies by Alibage and Jetter (2017), the research has identified personal, social, cultural and organisational (societal) dimensions as the four basic concerns for every consumer. It recommends four emotional drivers which are seeing-drivers, using-drivers, touching-drivers and feeling-drivers. Furthermore, two more additional emotional drivers are evolving towards making consumer-product interactions which represent factors in consumer's decision-making processes, brand experiences and products.

People bought emotional products that make them feel good which include most luxury products such as Apple, Mont Blanc, Aston Martin and many more (David, 2015). Professionals of food industry should take a further holistic (e.g., include perceptions, emotions, and cognition) research in order to understand consumer behaviour. Sensory cues in packaged food and packaging delivers emotional impact specifically in food product innovation (Kolasa, 2012).

Emotion and Productivity

Emotions have a huge impact on our mental energy. The challenge is tapping into emotional productivity, which is something that is much more difficult to control because sometimes it has no process. Emotional productivity is well known as the influence of emotions on productivity or performance. People's emotions, either positive or negative, not only affect people's job performance (in the workplace), which includes decision making, creativity, efficiency, teamwork, negotiation and leadership abilities, but also the emotions and behaviour of co-workers and customers (Crawford, Soto, de la Barra, Crawford & Olguin, 2014).

Positive emotion and negative emotion have been presumed could affect people's productivity. For instance, positive emotions encourage more creative and generative thinking and promotes the exchange of ideas and creation of consensus, especially in the workplace environment (Crawford et al., 2014; Oswald, Proto & Sgroi, 2008; Fisher & Ashkanasy, 2000). Meanwhile, negative emotions are linked to feelings of frustration and discomfort in the workplace, which perhaps may affect productivity.

Emotional productivity has also been referred as emotion and performance. According to Devonport, Lane and Hanin (2005), anxious, aggressive and nervous feelings were unpleasant states perceived as functional to successful performance. Moreover, happiness and excitement are positively correlated with concentration and performance. Emotions influence people by directing attention to factors that are functional to performance and lead to automatic physical movement (Vast, Young & Thomas, 2010).

Emotion also could affect decision-making performance. According to Fenton-O'Creevy, Soane, Nicholson and Willman (2011), emotions can induce biases in decision-making. For example, emotions also directly influence decision-making; i.e. fear and anger have significant effects on risk perceptions (Lerner & Keltner, 2001; Lerner et al., 2004), and also could be bias to the value attached to outcomes, i.e. intense negative emotions enhance valuation of short-term outcomes regardless of negative long-term consequences (Gray, 1999). Henceforth, positive affect tends to be associated with optimistic decision making, and negative affect with pessimistic choices (Fenton-O'Creevy, Soane, Nicholson & Willman, 2011).

Well-being and Happiness
Well-being comprises happiness and the experience of pleasant emotions. Also, emotional well-being includes a cognitive appraisal of satisfaction with life in general (Lamers, Westerhof, Bohlmeijer, Klooster & Keyes, 2011; Langeland, 2014). Moreover, according to Langeland (2014), emotional well-being is a cluster of signs reflecting the presence and absence of positive feelings about life. The positive feelings or emotions may be operationalised as positive affect, happiness and life satisfaction.

Happy people are those who experience frequent positive emotions such as joy, interest and pride and infrequent negative emotions such as sadness, anxiety and anger (Lyubomirsky, Sheldon & Schkade, 2005). Happiness is always linked with positive life and work outcomes such as life satisfaction, good health conditions, high work performance and commitment. Different scholars have defined happiness in their own ways and suggested different models to assess happiness.

Sprott (2005) asserted that happiness is dynamic, and temporal caused by external events. People will experience negative and positive feelings over a period of time and the balance of happiness and unhappiness can be achieved in the long term. As such, constant happiness is an unrealistic and unobtainable goal. The model suggested that the use of a self-reported instrument to measure happiness must consider the events that have affected the life of the respondent to avoid biased responses.

Diener (2009) defines subjective well-being in relation to happiness as a person's cognitive and affective judgments of his or her life. These judgments include emotional reactions to events as well as cognitive evaluations of satisfaction and fulfilment. It is a broad concept that encompasses experiencing pleasant emotions, low levels of negative moods, and high life satisfaction. In an earlier research, Diener, Larsen and Emmons (1984) proposed a scale including five items or statements to measure subjective well-being. The scale used 1 to 7 points to assess the levels of a person's happiness. In which the total score will indicate whether the person is extremely dissatisfied or satisfied with his life. In their work, satisfaction is used to describe happiness.

Job Satisfaction and Happiness
The nature and degree of people's satisfaction with their job have been examined in thousands of research investigations. Meanwhile, one of the most persistent topics of human interest appears to be the pursuit of well-being or happiness. Conversely, when researchers use the term happiness, they are usually referring to an individual's psychological or subjective well-being (Diener, 1984; Diener, Suh, Lucas & Smith, 1999; Wright & Cropanzano, 2000).

According to Wright and Cropanzano (2000), job satisfaction is specific to one's job, it does not include aspects of one's life outside of work. Henceforth, this comparatively narrow scope stands in contrast to research on psychological well-being in which the happiness component is typically considered a broader construct than job satisfaction, one that refers to aspects of an individual's life as a whole (Diener, 1984; Wright & Cropanzano, 2000). On the other hand, it involves the manner in which job satisfaction has been typically measured in organisational research. According to Weiss and Cropanzano (1996), although job satisfaction has been operationalised in many different ways, it usually is considered to be an attitude.

Otherwise, just as the focus of job-specific satisfaction is narrower than that of context-free satisfaction, it could be identified within the job satisfaction itself, several levels of specificity. According to Warr (1999), the most general construct is "overall job satisfaction" which could be explained as the extent to which a person is satisfied with their job as a whole. On the other hand, more focused "facet-specific" satisfactions derive from different aspects of a job surrounding, such as a pay, colleagues, supervisors, working conditions, job security, promotion prospects, the company and the nature of work undertaken. Different facet-specifications tend to be positively inter-correlated and satisfaction with one, is particularly closely associated with overall job satisfaction.

Hence, Brief (1998) scrutinised that job satisfaction can be best defined as "an internal state that is expressed by affectively and/or cognitively evaluating an experienced job with some degree of favour or disfavour". Nevertheless, the most widely used job satisfaction measures, for instance, the Minnesota Satisfaction Questionnaire, and the Jo Description Index, etc., contain few affectively toned scale items (Brief & Roberson, 1989; Wright & Cropanzano, 2000). Otherwise, happiness as the term commonly understood, is primarily an affective or emotional experience. In other words, happy individuals feel good in the sense that they experience a good deal of positive emotion and less negative emotion.

Work and Well-being

Most people want to be in paid employment, have high satisfaction with their job, and wish to avoid unemployment. In fact, some individuals experience considerable stress in their job and that can affect their behaviour and emotion in important ways. Other than that, well-being in the workplace is an important issue that should occupy a much more prominent niche in mainstream organisational research for many reasons.

According to Warr (1999), well-being of all kinds is often viewed along a single dimension – roughly, from feeling bad to feeling good. Such a dimension can capture important feelings, but it is preferable to think in terms of a two-dimensional framework, set out in Figure 1 below. A two-dimensional framework has been substantiated in many investigations – for instance, Matthews, Jones and Chamberlain (1990), Thayer (1989) as well as Watson, Clark and Tellegen (1988), which point out the importance of two independent dimensions of feeling or emotion, thus labelled "pleasure" and "arousal".
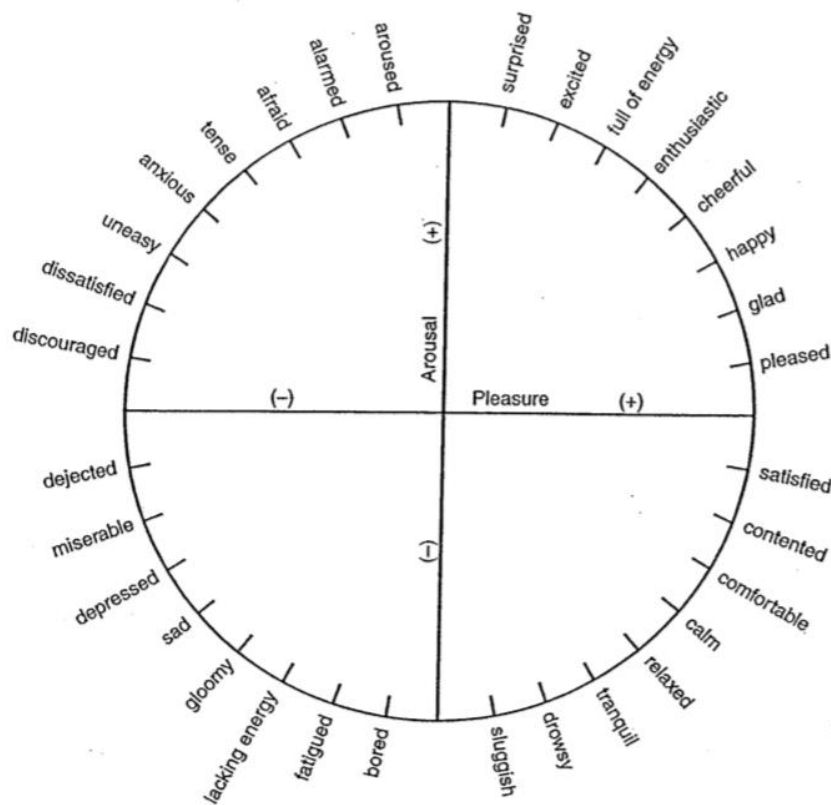
Figure 1: A Two-dimensional view of well-being (Warr, 1999)

Many researches have sought to identify the pattern of causality in the relationship between job satisfaction and life satisfaction: does job satisfaction cause life satisfaction, or vice versa? Therefore, for example, a longitudinal investigation by Judge and Watanabe (1993) indicated that the pattern was one of mutual influence, but that the impact of life satisfaction on job satisfaction was greater than in the other direction. A person's overall well-being has a strong impact on people job specific well-being, and job well-being also affects general feelings or emotions.

For example, according to Warr (1999), these overlaps have been examined in terms of the "spillover" from job to home and from home to work. For instance, in a study of male employees, Piotrkowski (1978) described cases of positive spill-over, husbands who enjoyed their work and experienced emotions and feelings of self-enhancement from the working day; they came home cheerful and both emotionally and interpersonally available to their families. On the other hand, some husbands were tired, irritable, and emotionally nonresponsive after a day's work, and family members had to work hard to engage them in domestic and social activities.

On the other hand, Seligman (2011) in his work to define happiness and well-being, introduced five elements that people choose to be happy: positive emotion, engagement (being in the flow), relationships, meaning (purpose in life), and accomplishment (PERMA). In their work investigating employees' happiness index, Anitawati et al. (2018) extended Seligman's PERMA model to PERMAI after identification of infrastructure which include facilities in work environment as another important element that influences employee's happiness.

Anitawati et al. (2018) defined happiness as a mental or emotional state of well-being which can be defined by positive or pleasant emotions ranging from contentment to intense joy. Having said that, the positive emotions are one of the pillars in positive psychology. Having a positive sense of emotional well-being can be seen as both the experience of emotions and as the regulation of emotions. In addition, emotional well-being includes positive subjective experience of the past, present, and future, as well as being related to the past in contentment and satisfaction. Whilst positive subjective experience about the present is happiness, flow, ecstasy, and sensual pleasures (Langeland, 2014).

Social scientists and scholars probe happiness by looking at the maximisation of pleasure and virtuous human qualities that contribute to a good eudemonic life. For instance, human experience of well-being is greatly influenced by their connections to other people. Thus, most social scientists consider the influence of friendships, family relationships and communities on happiness, whilst economists focus on the influence of consumption, wealth and economic growth on well-being (Dutt & Radcliff, 2009; Sachs, 2012; Mahadea, 2014). Scientists and psychologists often use WEMWBS (The Warwick-Edinburgh Mental Well-being Scale) to measure mental well-being. WEMWBS was developed by researchers at Warwick and Edinburgh Universities (Tennant et al., 2007).

Good Governance and Well-being
Organisational commitment is a commonly assessed job attitude. It refers to normative commitment based on personally identifying with the organisation's goals and values; and affective commitment based on feeling or emotion as part of the organisational community (Simone, 2014). Henceforth, organisational commitment may be an important component of well-being at work.

There has been an explosion of interest in positive and negative affect at work since the mid-1990s, hence, it was defined as typical or transient emotions experienced while working. According to Fredrickson's broaden-and-build theory, positive emotions function in the short term to broaden one's thought-action repertoire and thereby build in the long term one's cognitive, social, psychological and physical resources (Fredrickson, 2001).

Meanwhile, organisational commitment can also be referred to as good governance. Does good governance improve well-being directly, or does it act mainly or entirely indirectly, because of what it can achieve by way of other outcomes? According to Helliwell, Huang, Grover and Wang (2014), to distinguish direct from indirect linkages between good governance and well-being, two types of correlational evidence such as the simple relations and the model that attempt to sort out the likely channels of influence, should be considered.

The effects of good governance are usually assessed by searching for linkages between governance and economic outcomes and treating these economic outcomes as proxies for well-being more generally (Helliwell et al., 2014). According to Helliwell et al. (2014) again, there have been two models used to describe how good governance could improve economic well-being: i) market-enhancing governance approach which views governance as effective if it helps to foster strong property and contract rights and a stable rule of law; and ii) growth-enhancing governance approach, which views good government as being able to foster economic growth by managing incentives to enhance productivity and help shift activity to more economically productive endeavours with the underlying assumption that such productivity would lead to increased well-being.

The World Happiness Report 2018 has demonstrated that a country's ranking on happiness depends on six key conditions: economic prosperity, including decent work for all who want it; the physical and mental health of the citizens; freedom of individuals to make key life decisions; strong and vibrant social support networks (social capital); shared public values of generosity; and social trust, including confidence in the honesty of business and government. The investigation has focused on policies, positive education, work & well-being, and societal well-being. One of the important results indicates that the people highest in well-being are those who enjoy the benefits of robust social connections such as trust and social support. Conversely, those who are lonely, or are otherwise estranged in their relationships, report lower levels of well-being. According to the yearly report, Malaysia Happiness Index has gradually increased from 5.76 to 6.32 over the span of 5 years until 2018. Malaysia is ranked 35th, one spot behind Singapore, and ahead of its neighbouring countries, as compared to 56 in 2013.

LEIQ™

Synthesising past studies involving emotion and its influence on decision making, productivity, well-being and QoL, this research proposed a model to classify emotion, the factors that contribute to the emotion, and the importance of the factors to the people who interact with a particular stimulus. The model is called LEIQ™, a model to be used as an instrument to assess emotion in diverse domains. Figure 2 illustrates the LEIQ™ model, which was built based on axes of emotion vs. importance, to indicate the importance of the identified factors to the emotion of the people. The quadrant consists of 4 spaces of:

- Positive Emotion and Important Quadrant
- Positive Emotion and Not Important Quadrant
- Negative Emotion and Important Quadrant
- Negative Emotion and Not Important Quadrant

In its implementation, both qualitative and quantitative approaches could be used with the utmost focus to understand factors contributing to the emotional dimension in different cases, and how important it is to the people who interact with the stimuli. This is to enable analysis of factors that influence the emotion and its importance to the people. It can also be used to understand the current state of emotional responses of a team, an organisation, a society, or even a nation. Thus, it is important to classify each factor according to a suitable space to represent emotional state towards the factors in the adoption of LEIQ™ model. The result will enable identification of factors which significantly influence people's positive or negative emotional states, which can be used by decision makers to devise effective strategies for people's well-being.
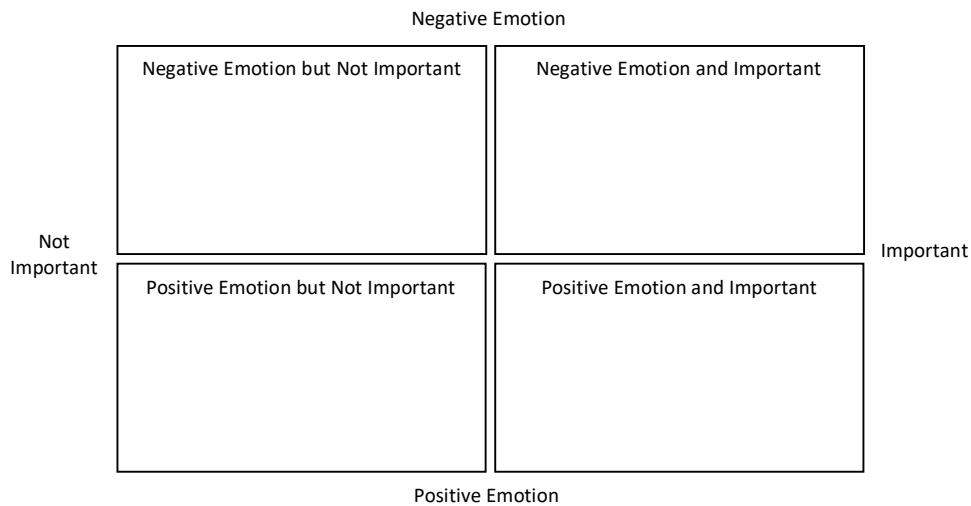
Figure 2: The LEIQ™ Model

CASE STUDIES

This paper presents two case studies adopting the LEIQ™ model, in its investigation of employee's happiness, and people's well-being. In both case studies, the model was adopted with the term happiness and well-being to represent positive emotional dimension.

Case Study 1: Employee's Happiness

The investigation adopted the LEIQ™ model using qualitative and quantitative approaches in its method to discover employee's emotion towards their work-life. Figure 3 illustrates the research method involving the adoption of LEIQ™ model in the study. Eight focus group sessions were conducted in the investigation, involving four to six employees in a group consisting of people from different designations. Each participant was given two different coloured cards (pink and blue). The pink cards were used to write factors that made them feel happy at their workplace, and the blue cards are for factors that caused their unhappiness at their workplace.
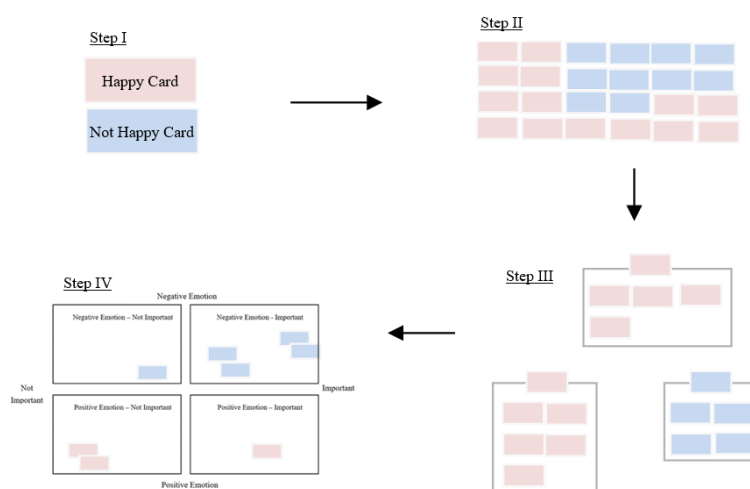

Figure 3: Happiness Classification Method (Anitawati et al., 2018)

After the cycle of writing cards is exhausted, they were asked to put all cards to groups that make sense to classify its characteristics. When all cards had been grouped, the participants were asked to assign a cluster name that could represent the classification. The participants were then asked to allocate the cluster's name onto the (LEIQ)™ model to indicate the importance of the identified clusters to happiness of the employees.

The study resulted in 67 clusters of the 'Happy and Important' dimension, 94 clusters of the 'Not Happy but Important' dimension, 23 clusters of the 'Not Happy and Not Important' dimension, and 13 clusters of the 'Happy but Not Important' dimension. The significance of factors which contribute to the happiness of the people could be observed via a *Wordcloud* drawn onto a space of Happiness vs. Importance.

For instance, the result as presented in Figure 4, based on the four quadrants discussed in the previous section; namely, the Negative Emotion and Important Quadrant (Q1) and the Negative Emotion and Not Important Quadrant (Q2), the Positive Emotion and Important Quadrant (Q3), and the Positive Emotion and Not Important Quadrant (Q4).

In Quadrant 1, the Negative Emotion and Important Quadrant, majority responses highlight that Collegiality & Congeniality (C&C) is the most important factor that affects participants' negative emotion at work. Collegiality is defined as the relationship between colleagues and congeniality refers to the act of friendliness among colleagues. The working environment is also a contributing factor that provides negative emotion and it is important to the employees. This is related to the third and fourth factors; facilities and staff welfare. The working environment may include bad facilities, and these may reflect negative emotion in the workplace. If staff's welfare is not well-taken care of, employees may feel insecure and generate negative emotions in day to day working operations. Staff's welfare may include personal and family matters. Other important factor which caused negative emotion in workplace, includes reward and benefit. This indicates that employees were not happy with the existing reward and benefit scheme or facility provided by the employer.

Meanwhile in Quadrant 3, the Positive Emotion and Important Quadrant, facilities were the most important factor affecting participants' positive emotion at work. Perhaps having good facilities may increase job performance and productivity. Next, responses related to Workload and Staff Welfare is among factors that could make participants happy at work. Perception is also seen to be an additional significant factor in this matter, albeit less important to the participants. These results provide indication to employers on factors that should be improved to promote happiness at the workplace, and ultimately increase productivity of the employees.
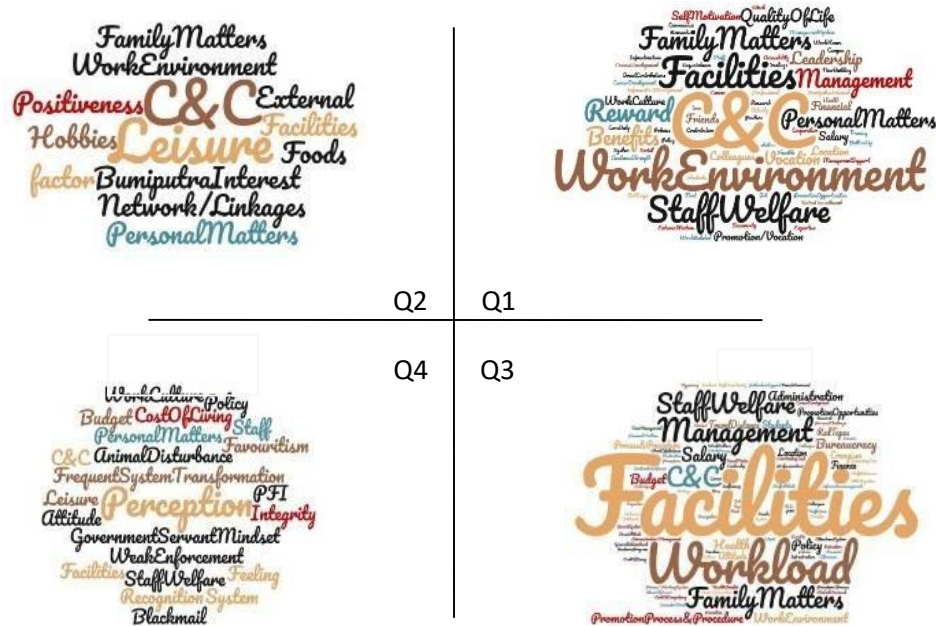
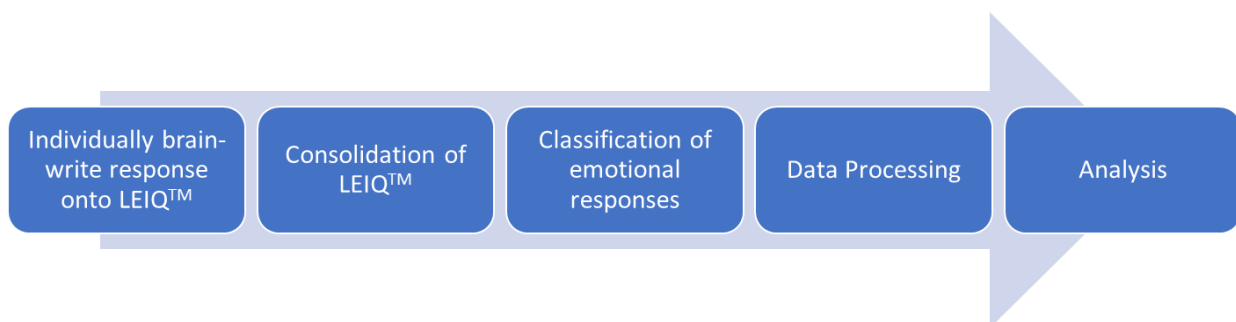Figure 4: Employee's Happiness vs. Importance (Anitawati et al., 2018)

Figure 5: Process for LEIQ™ for Student's Well-being

Case Study 2: Student's Well-being

The second case study was performed based on a qualitative approach of the LEIQ™ model. Figure 5 illustrates the research method involving the implementation of LEIQ™ model in the study to identify state of well-being, comprising of their implicit feelings towards campus life, and factors that influence the implicit feelings. In the first phase, each respondent individually brain-writes their response onto the LEIQ™ Quadrants provided. The responses are open-ended, which means that respondents may express their emotion without any restriction. Once the responses are collected, the LEIQ™ Quadrants are consolidated and the emotional responses are classified based on theme. The data is then processed and analysed.

Result

In the investigation, a total of 2,412 students from a few public universities in Malaysia voluntarily participated in this research. The respondents were asked to provide input of matters that affect their implicit feelings and emotion both negatively and positively. Every participant was given one LEIQ™ template and were asked to quietly brain-write their implicit feelings onto each quadrant on the empty template to indicate factors that make them happy or factors that make them unhappy. The data obtained from this process were then classified into related emotional responses that make sense to the pattern of input, and finally analysed

to discover factors that affect their well-being in campus life, and the magnitude of the factors to their implicit feelings.

As shown in Figure 6, the result is presented according to each quadrant. Q1 represents factors that caused grievances and are most important to students, as articulated by the respondents. Based on the word-cloud, the bigger the font size, the higher the number of cumulative responses provided by the respondents.

According to the responses, funds, cost of living, and limited future job market are among what matters most and bring negative influence on their well-being. As illustrated in Q2, Wi-Fi and transportation appears to be the highest concern that impacted negative emotion to students, but they are less crucial as compared to factors articulated in Q1. On the other hand, as shown in Q3, family, financial support, and low education fee are factors that highly influence their positive well-being in campus life, while shopping, entertainment, travel and shopping also have some significance to their happiness (as shown in Q4).

Figure 6: Process for LEIQ™ for Student's Well-being

Additionally, the research made a quantitative analysis based on the classification of qualitative data. The classification was based on 15 main issues identified from the qualitative data. The data were classified into social, education, cost of living, facilities, government, employment opportunities, economy, transportation, science and technology, security, politics and health, environment, religion and others, for those that do not fit in the specific classification. This quantitative analysis helps stakeholders to further understand of the type of issues that need to be given more attention according to its frequency of mentions.
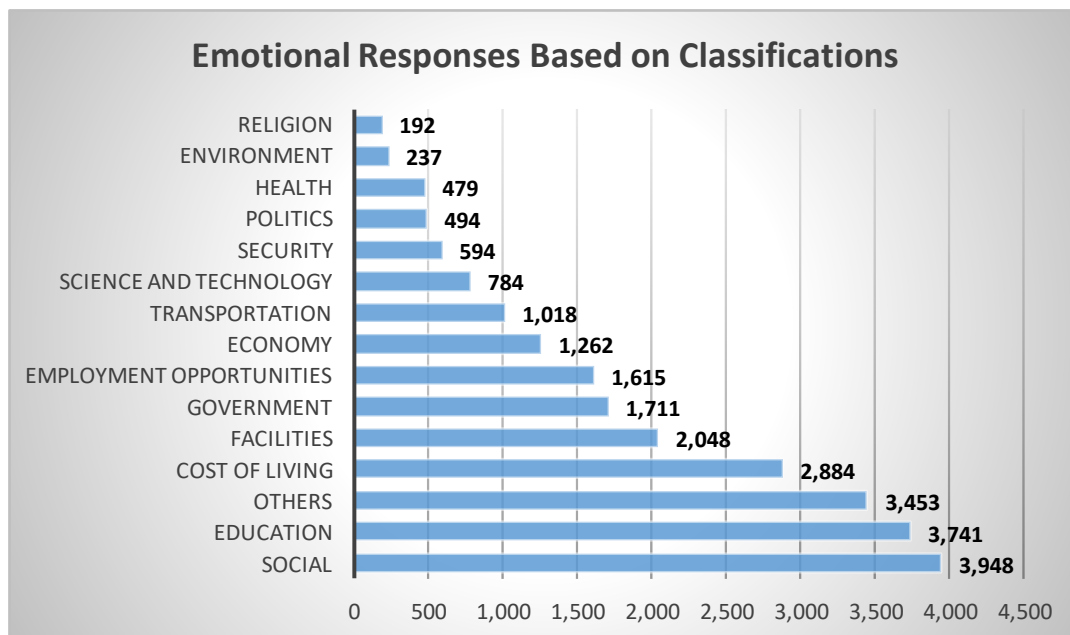
Figure 7: Emotional Responses Based on Classifications

Figure 7 shows the analysed findings based on the classifications as described. Overall, the classification based on the 'social' cluster resulted in the highest number of responses (3,948), followed by the 'education' cluster (3,741). Next in the line is 'cost of living', which also effects the respondents' emotion, with a total of 2,884 mentions. Fourth is 'facilities' (2,048), and finally the least mentions in emotional responses is 'religion' (192 mentions).

The overall results provide an indication to leaders and management advocates on factors that should be given priority for improvement and factors that should be maintained and empowered to promote student's happiness and well-being at campus life, and ultimately boost student's quality and the productivity of graduates.

CONCLUSION

This paper presented the fundamentals of the LEIQ™ model and discussed how its adoption has enabled the classification of emotional responses based on mentions, the factors that contributed to the emotion, and the importance of the factors to the people who interact with the particular stimulus. Two case studies were presented: i) to groups of employees in an educational organisation; and ii) to groups of students from a few universities in Malaysia. The case studies have showcased the successful implementation of the LEIQ™ model, and successful identification of the intended assessment of emotional dimensions towards certain stimulus. The model was adopted with careful attention to cooperative attitude and engagement among participants and with LEIQ™ moderators. Both case studies have allowed the participants to draw large amounts of opinions and issues, and organised them into their natural relationships, such as environment, welfare, and financial matters. These results can be used by decision makers as an effective strategy to prioritise factors that significantly influence people's emotion in the effort to elevate well-being and thus increase happiness and productivity at work and in daily life, ultimately contributing to positive QoL at large. The model is recommended for implementation to larger scale investigation in different cases, such as people's happiness in a community, society, a country, and at workplace in order to improve people's QoL. Further investigation and analysis are recommended to extend the

accuracy and effectiveness of strategy and action plan for improvements. Adaptation of different types of analysis and convergence of tools and theories could also be considered to extend the potential outreach of the model.

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