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## **The Link between Emotional Intelligence (EI) and Cultural Dimensions in the Context of the Micro Hospitality Sector**

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**Abstract:** This paper aims to contribute to the understanding of the cultural awareness and emotional intelligence factors that prevail amongst owner managers in the micro restaurant sector.

The micro hospitality sector is an important part of the hospitality industry, which plays a vital role in the UK economy. A significant feature of this sector is the multicultural composition of both the owner-managers and the staff. In a customer focused industry emotional intelligence has major significance, and sensitivity to cultural norms can play an important part in the success of an enterprise.

This paper utilised an original data set of 99 owner-managed, micro businesses, employing a maximum of ten people, and often fewer. A Kruskal-Wallis test was run to assess whether the EI construct generalised across the studied cultural groups and it was concluded that there are no differences in EI scores with respect to ethnicity and therefore, the outcome of this research is that the EI construct generalised across the studied cultural groups.

This paper is relevant in enriching the understanding of the benefits of EI, which appear to reside in raising awareness of emotional issues in the multicultural environment of the micro restaurant sector where the manager-owners are demonstrated to have a significant influence on the motivation of employees.

**Keywords:** Emotional Intelligence (EI), Hospitality Industry (HI), Micro Restaurant Sector (MRS), Cultural Dimensions.

### **Introduction**

This paper examines the extent to which the concept of Emotional Intelligence (EI) varies depending on cultural factors within the environment of the Micro Hospitality sector (MRS).

A chief characteristic of the Hospitality Industry (HI) is that it is dominated by small and medium sized enterprises. According to Eurostat (2003) 95% of businesses in the accommodation and food sector have fewer than 25 employees. The applicability of EI to the

Hospitality Industry is due in part to the close interaction of staff in the pursuit of a common goal, and additionally to the high element of human contact with the customer where the provider of the service becomes “part of the product itself” (Langhorn, 2004; Lashley, 2008).

Nazarian & Atkinson (2013) warn of the negative and damaging impact of ignoring the influence of the size of organisations on organisational culture, and it is certainly the case that small enterprises are not simply scaled-down versions of large ones (Storey, 1994; Beaver & Prince, 2002) therefore theories developed in the context of large business cannot be applied without caution to the MRS.

Another significant feature of the MRS is that the majority of these small hospitality businesses are run by ethnic minority immigrant owner-managers (Basu, 2004) thus giving import to the cultural dimension in terms of Human Relations Management (HRM).

Although significant research has been conducted into culture (Trompenaars & Hampden-Turner, 1997; Hofstede & Hofstede, 2005) and into Emotional Intelligence (Goleman, 1998; Salovey & Mayer, 1990; Zadel, 2013), little or no research has been conducted into the influence of emotional intelligence on the effectiveness of owner-managers in the micro business context and even less has been conducted into whether there is a cultural dimension to this. This paper aims to address this omission.

## **Literature Review**

Since the publication of the Bolton Report in 1971, the issue of what constitutes a “small” business has posed considerable problems for researchers (Nolan, 2002). One of the latest notes published by the House of Commons (2012) adopted the number of employees as its key indicator: a small or medium sized enterprise (SME) being one with less than 250 employees, a “small” business being one with less than 50 employees and a “micro” business being one with less than 10 employees. This would put the majority of restaurant establishments firmly in the category of micro businesses.

It must be emphasised that small firms are not a homogeneous entity; thus any attempt to generalise about some three million firms in the UK is somewhat difficult (Department for Innovation, University and Skills, 2007). For the purpose of this study only MRSs employing non-family members, were examined, because the exact concept of the family business remains open to interpretation.

## **Culture**

Brocke & Sinni (2011), in their review on culture in business, acknowledge that it is not easy to define culture though there have long been attempts to do so. By the middle of the last century Kroeber & Kluckhohn (1952) had identified more than 150 definitions. Despite this it is possible to see a theme running through the definitions. For example Swidler (1986) sees culture consisting of “a repertoire of habits, skills and styles” with Schein (2005) describing it as “a pattern of shared basic assumptions”. This fits well with Hofstede’s (2005) much quoted definition of culture as being “the collective programming of the mind which distinguishes the members of one human group from another” (Rugman and Collinson, 2012, pg 134). Rahim & Marvel (2011) suggest that there are two elements which define culture. The first of these

relates to the way in which culture is manifest and is based upon Schein's (2004) three-layer model.

Naturally, visible artefacts should be the easiest layer to observe and interpret as they are made apparent through dress, types of behaviour and other overt signs. According to Rahim and Marvel (2011) "... on all group levels, there are values manifesting themselves in visible artefacts that can be perceived as beneficial or cumbersome ..."

It is less easy to spot 'espoused values' even though they might be specifically and publicly stated in term of opinions on day-to-day issues.

Undoubtedly the layer which is most problematic is that of underlying values. Schein (2004) explains that "... the visible parts of culture result from an institutionalization of the underlying values ..." so, being sensitive to 'espoused values', and an ability to interpret 'artefacts' correctly might be the most difficult yet important facets in understanding a culture and it is may well be the one in which EI plays the most significant part.

Hofstede (1980), amongst others, tried to identify the 'cultural dimensions' which determine the way in which members of a culture may be expected to deal with certain situations. Hofstede's original dimensions included Individualism versus Collectivism, Power Distance, Uncertainty Avoidance and Masculinity versus Femininity, with a fifth dimension, Long-Term Orientation being added in 1991.

Although further dimension have since been identified this paper has chosen to focus on the above five dimensions as they are the most widely accepted. Moreover other studies of cultural values support the stability of these particular dimensions (House & Javidan, 2001; Hoppe, 1990; Helmreich & Merritt, 1998).

Slight nuances in Hofstede's various dimensions may not be noticeable, but obviously cultures operating at diametrically opposed ends of them could have problems understanding each another. In turn this could cause heightened tension, particularly in the stressful environment of a busy restaurant.

In Denmark and the Netherlands, Hofstede et al. (1990) found that organisational culture explains considerable variance in values held by employees. It appears that people who belong to high-context cultures, such as India, depend on the external situation and environment and use nonverbal clues for exchanging and interpreting communications and in Arabic, Japanese and Chinese cultures an indirect style of communication is valued (Hall, 1976). However, in low-context cultures, the external environment has lower importance and explicit and direct communication is valued with nonverbal clues often being ignored. This implies that a higher level of emotional competence is required in high-context cultures where the individuals need to show empathy and be sensitive to others' emotions, with less emphasis being made on being task focused. On the other hand, low-context cultures may focus less on emotions or relationships and prefer overt and matter of fact communication in their dealings.

It should be noted that although Hofstede's work is widely regarded, others have offered different interpretations. For example, Erez & Earley (1993) adopted a more "individual" approach to culture by seeking to understand how an individual's actions are in part the result

of national and even organisational values. The basic premise of their framework is that the work environment, including cultural values and managerial techniques, impact employee behaviour through a person's self-knowledge (Erez & Earley, 1993).

Furthermore, there is a danger in treating any culture as if it were fixed, uniform and universally applicable since, as McSweeney (2002) points out, they are in fact highly differentiated and dynamic. Indeed Myers & Tan (2002) suggest a much more dynamic view of culture that sees culture as contested, temporal and emergent.

The second element identified by Rahim & Marvel (2011) is the scope of the referenced group. This may include nationality (as per Hofstede, 2005), an organisation or any other sub category. Importantly for this paper Leidner & Keyworth (2006) in Rahim & Marvel (2011) "identify the differences between a national, organizational, and subgroup level of culture and suggest a holistic understanding of culture based on its manifestation". The relevance for this study is that most of the MRSs under consideration could be considered to be operating at subgroup level.

However, there are those who question whether it is acceptable to make distinctions between people based on national differences if this means perceiving culture as static and falling neatly onto a particular set of predefined dimensions of validity. Brocke & Sinni (2011) also consider that country borders are imperfect boundaries for different societies and view culture as informal institutions with practiced codes of conduct.

There is a further concern that the acceptance of cultural dimensions could actually encourage attitudes based on stereotypes which might obscure issues that could be revealed by a more subtle approach (Rimington and Alagic 2008).

### **Culture and emotional display**

Trompenaars & Hampden-Turner (1997) refer to the 'neutral-affective' dimension when considering differences in emotional display across cultures. This dimension relates to how much emotion people from a culture appear to show, varying from showing little emotion (neutral) to showing a lot of emotion (affective). The implications for this in a highly interactive setting such as a busy restaurant are evident.

Indeed there is likely to be more than one underlying cultural factor influencing differences in how we display emotions (Lumley and Wilkinson, 2013). Ting-Toomey (1999) suggests that the individualism-collectivism dimension plays a part, with individualists expecting to be able to express personal feelings freely whilst collectivists having concern for others' opinions may well be more circumspect in revealing any emotions. For instance, in the case of verbal directness, showing emotions too strongly could be a threat to harmony and face in collectivist cultures. Individualism is marked by focus of people on themselves. Collectivism distinguishes between the in-group (comprising relatives, caste, and organization) and other groups. The Western model of culture brings with it the assumptions of individualism (Hofstede & Hofstede, 2005) where members see themselves as independent and motivated by their own preferences, needs and desires; consequently people acquire those personal and social EI competencies that are valued in their culture.

## **Emotional Intelligence**

A clear and simple definition of EI is still elusive. Indeed “Intelligence” itself is notoriously hard to define, and there is still no good general definition of what it means for human to possess intelligence (Sternberg, 2000). According to Mayer et al., (2004) and Matthews, Roberts & Zeidner (2004b), conventional intelligence tests (IQ tests) do have sufficient power to predict attributes of a person that relate to intelligence. On the other hand the literature on the multitude of qualities encompassed by EI can appear overwhelming (Matthews et al., 2004a). Conceptualization of EI ranges from simple ability models (Salovey & Mayer, 1990; Zadel, 2013) to more complex mixed models. Ability models conceptualise EI in a similar way to mental (cognitive) intelligence and define EI as ability. EI is assumed to develop over time and may be measured via a test based on performance (Rosete & Ciarrochi, 2005). In contrast, mixed models of EI incorporate both non-cognitive models (Bar-On, 1997) and competency-based models (Goleman, 1998). Mixed models define EI as “an array of non-cognitive capabilities and competencies” (Bar-On, 1997:14) and tend to utilise self-reports as their primary mode of assessment. Therefore, the range of definitions of EI identified depends on the particular model being considered. Thus, according to Gardner & Stough (2002), the range and scope of definitions that currently exist within the literature lead to considerable confusion and make comparisons between “the science of EI and the allegory underlying the Tower of Babel” (Gardner and Stough, 2002: 69) inevitable.

Oatley, (2004) on the other hand, suggested that it is not definitions that are the primary issue, but concepts. Given the relative youth of the EI construct, Gohm (2004) concluded that it is too early to agree on one definition and advocated that the field might benefit from investigation of different definitions. Nevertheless, though definitions of the EI construct vary, these do tend to be complementary rather than contradictory (Giarrochi, Chan & Caputi, 2000). Consequently, Gohm (2004:223) concluded that, “EI is a multifaceted construct and lack of a consensual definition is not a catastrophe”.

The model of EI adopted for this study was developed by Mayer and Salovey (1990) and is classified as an ability-based model. The use of this frame is significant and it defines EI as:

- The ability to perceive emotions
- To access and generate emotions to assist thought
- To understand emotions and emotional knowledge
- To reflectively regulate emotions to promote emotional and intellectual growth.

A significant range of literature has provided evidence for the reliability and validity of this framework (Caruso et al., 2002; Matthews et al., 2004a; Rosete & Ciarrochi, 2005; Kerr et al., 2005).

Currently the only available way to measure EI, as defined by the mixed models, is via self-perceived reports of respondent’s own EI. Besides the view, expressed by Woodruffe (2001) that it is not particularly emotionally intelligent to test EI, the other issue is that self-reports are subject to reporting bias, especially in organisational contexts where people might be motivated to fake responses. There is now substantial evidence to suggest that self-report measures of EI show a relationship with personality (Gohm, 2004) and such an overlap may make interpretation difficult. Furthermore, Rosete et al., (2005) argue that presumably, ability

measures are more difficult to ‘falsify’, given that people do not know the ‘correct’ answers in advance. EI is defined by Mayer & Salovey (1997) as a group of mental abilities, and is best measured using a testing situation that is ability based. This focus on objective, performance-based assessment is similar in spirit to traditional IQ measurements.

Performance-based measures of EI take a similar approach. The most current measure is the Mayer, Salovey, Caruso EI Test (MSCEIT V2.0), which, using this approach, yields scores based on an individual’s performance on a set of items designed to measure the four-branch model of EI (Mayer et al., 2003).

As noted, the definition of Emotional intelligence (EI) adopted for this study incorporates the ability to perceive and understand emotions in self and others (Mayer and Salovey 1997). In fact Lillis & Tian (2009) argue that these EI abilities can be learned, and indeed are likely to be shaped by aspects of a particular culture.

Peltokorpi (2008) identified cultural empathy as a primary determinant of expatriate cross-cultural adjustment. Unfortunately individuals universally tend to assume that others see the world from the same perspective (Lillis & Tian, 2009) meaning that the challenge of cross-cultural EI could present difficulties in the MRS.

As Parker, Saklofske, Shaughnessy, Huang, Wood, & Eastabrook (2005) noted special care needs to be taken when using the EI construct in different cultures, because culture can influence the experience and expression of emotions. Additionally, Sharma (2012) stressed that, though within the cultural context, emotional and social competency requirements would seem to vary, people are expected to absorb and display culture-specific EI competencies in their behaviour.

Other work on culture has argued the need to consider more than just cultural values in order to gain a perspective on how culture impacts intelligence and emotional competencies (Earley & Mosakowski, 2004; Sharma, 2012). Kroeber & Kluckhohn, (1952) suggest that culture consists of explicit and implicit patterns of behaviour which are acquired and transmitted by symbols. Thus culture is expected to play a major role in the acquisition of emotional competencies during the process of socialisation and any improvement in cross-cultural communication would come about through improved understanding of the behavioural patterns and value emphases adopted by other cultures.

Similarly, Antonakis (2004) concurred that emotional gauging skills might be a function of national culture, hence the skills considered effective in one culture might not be effective in another culture. Consequently, if EI were a culture-bound construct (Prati, Douglas, Ferris, Ammeter and Backley, 2003b; Antonakis, 2004; Gohm, 2004; Parker et al., 2005; Elfenbein et al., 2007; Gabel-Shemueli and Dolan 2011) a critical issue is whether the concept generalizes across diverse cultural groups.

So, conceptually EI can enhance cultural awareness in culturally diverse settings. Peltokorpi (2008) showed that the personality traits of emotional stability and cultural empathy had a positive influence on cross-cultural adjustment. Moreover Lillis & Tian (2009), based on their study of 32 undergraduate students enrolled in an introductory management course in a small

private college, speculate that those who were high in EI were also more likely to perceive context-driven emotion patterns and were therefore better able to adapt to various situations than their low EI counterparts.

Following on from this is the critical question of whether the EI construct generalises across cultural groups in the context of the MRSs under consideration where the workforce comprises an eclectic mix of individuals (countries, backgrounds, genders, languages, etc.). It is of interest to understand to what extent the owner managers from one culture display understanding and empathy to these distinctions when interacting with someone from a different culture. Increased comprehension of the emotional dynamics that are at play could have a major impact on the performance of activities at both the individual and organisational level in the micro hospitality sector.

Ethnicity and gender are two classifications of individuals which have been studied extensively by social scientists. Several studies have reported ethnic group differences in cognitive ability tests (Schmitt, Rogers, Chan, Sheppard & Jennings, 1997; Ones and Viswesvaran, 1998). There is also evidence to suggest that there may be considerable cultural variability in the widely used models of EI. The ability to recognize emotions from facial expressions, for instance, is included as a key component in most models of EI (Mayer et al., 2003; Bar-On, 2005). Matsumoto (1993), for example, used American born undergraduates of Hispanic, Asian, Caucasian, and African backgrounds to identify and evaluate various emotional stimuli. Differences were found among the ethnic groups on emotion judgments, display rule attitudes, and self-reported emotional expressions. Conflicting results were found by Roberts, Zeidner, & Matthews (2001) in their study that evaluated ethnic group differences in EI. In light of these mixed findings, Roberts et al., (2001) stated that there is currently an urgent need for studies exploring group differences in EI. Mayer et al., (2003) in their study found significant gender differences on MSCEIT V.2; however, there were no significant differences related to ethnicity.

The investigation, undertaken by Van Rooy et al., (2005) looked at three ethnic groups: Caucasians, Blacks and Hispanics separately. Interestingly, the minority groups (Hispanics and Blacks) had higher EI scores than the majority group (Caucasians). However, the study consisted of a restricted range of 275 undergraduates, using a self-report measure of EI, subject to bias. Thus, the cross-cultural aspect, especially in non-western environments, is an obvious subject for further research. Having considered the cultural boundaries of EI the researcher has adopted the Restaurant Industry Gold Standard Report (RIGS) restaurant classification and believes that investigation of EI in other cultures may increase the understanding of the construct (The Restaurant Association, 2002).

The concept of EI remains the subject of controversy and challenge. As Antonakis (2004) noted the situation concerning popular notions of EI and their influence on the business world is troublesome from scientific, economic, and ethical points of view. The major issues surrounding the construct are psychometric and conceptual: the theoretical basis for EI is limited, conceptualization of the construct is problematic, and EI has proven resistant to adequate measurement. Thus the question which has been raised by researchers is whether EI

is simply general intelligence, directed at emotional phenomena, or a separate entity (Mayer et al., 2001; Keenoy, Oswick & Grant, 2003).

Regardless of how EI has been measured, the possibility for cultural relevancy has been largely ignored. Research into whether culture impacts emotional intelligence is limited, yet for the MRS this is an area which could have real relevance. Nevertheless, the benefits of EI appear to be in raising awareness of emotional issues and motivating educators and managers to take emotional issues seriously. As Matthews et al., (2004b) argued, in order to help science and be useful in practice the research should evaluate the legitimacy of each of the models of EI and the issues of reliability and validity of the measurement should be addressed.

The weight of evidence suggests that small business owner-managers regard themselves as disadvantaged by politicians, large companies, banks and local authorities (Yosef, 1998; Craig & Lindsay, 2002; Basu, 2004; Seyal et al, 2011). Additionally, the decisions of the owner-manager may be affected by emotional pressures through isolation and stress. This leads to the question, which will be investigated further: whether successful leadership relates to the ability of owner-managers to understand and manage moods and emotions in such a high pressured, complex and competitive environment.

## **Methodology**

This study aimed to investigate the little-understood phenomenon of the impact of EI competence in the culturally diverse setting of the MRS. The emotional expressiveness of owner-managers in different cultural settings will be examined as will the extent to which the concept of EI differs depending on these settings.

### **Mayer-Salovey-Caruso MSCEIT V2.0**

The MSCEIT is evaluated as the only test which has received support from academic researchers (Matthews et al., 2002; Conte 2005). This test directly operationalizes the EI construct as intelligence, by asking participants to solve problems using, and about, emotions. It is designed to measure:

- perceiving emotions
- using emotions
- facilitating thought
- understanding emotions, and
- managing emotions (Mayer et al, 2003).

The raw scores obtained on the MSCEIT V.2 were used to measure the extent to which EI scores differ with respect to ethnicity.

### *The Kruskal-Wallis test*

This test provides an alternate statistical procedure for testing whether the EI construct generalizes across cultural groups. This test was chosen because a nonparametric technique is used for comparing populations that require no assumptions concerning the population probability distributions, whereas analysis of variance (ANOVA models) requires populations to be normally distributed, and variances of the populations to be equal (Anderson, Sweeney



& Williams, 1993). Other key assumptions are: random sampling is assumed, as with all significance tests as well as independent samples and independent observations. In addition, the nonparametric Kruskal-Wallis test can be used with ordinal data as well as with interval or ratio data and is applicable to small samples. The condition required for the validity of the Kruskal-Wallis Test is that ideally there should be five or more measurements in each sample. The above requirements are valid for the data, collected for this research.

One of the conditions required for the validity of the Kruskal-Wallis test as with all significance tests is that samples are random and independent. The sample for this research was obtained by means of a probability sampling procedure which will always produce a more representative sample than non-probability (Diamantopoulos & Schlegelmilch, 2000) and considering that micro restaurants are not a homogeneous population a probability sampling procedure was justified.

### *Sampling Constraints*

The MRS comprises approximately 173.000 units across the UK (The Restaurant Association, 2002). Taking into consideration the size of the study and the size of the entire population it was considered acceptable to reduce the number to a manageable size by selecting a representative sample. West London was chosen, because of the significant number of micro restaurants located in the area.

For this study, the Restaurant Guide, included in the West London Yellow Pages directory (Yellow Pages Publication, 2013), provided the chosen sampling frame and the sample population was determined by identification of the common characteristics of the MRS a follows:

- RIGS licensed establishments
- Average dinner price for two persons £50
- Size of establishment is less than 20 employees
- The employees are not family members
- Number of years in trading at least two years
- High quality food and drink

The second justification for selection was an attempt to investigate the perception of the phenomenon in different cultural settings. The West London Restaurant Guide groups restaurants into following segments: Chinese, Thai, Japanese, Indian, European, Italian, Spanish, Greek, Mediterranean and English. In accordance with RIGS (The Restaurant Association, 2002), restaurants were arranged into three intact groups:

- Anglo/Franco, including British/Cosmopolitan, Modern and Traditional English, and French restaurants;
- European, including European, Italian/Spanish and Mediterranean restaurants;
- Ethnic restaurants, including Chinese/Oriental and Indian/Pakistani, in relation to the criterion which has driven the sample case selection, the following number of restaurants fit the chosen criteria:
  - Ethnic 50
  - European 28

- Anglo/Franco 21

However, taking into account the small size of the population a ratio of sample size to population size of about 30:100 was advisable (Neuman, 2003). Other issues which were considered when defining the sample size were the degree of diversity in the population and the number of variables to be examined in the analysis of the data.

The defined sample size included 99 units and was divided into sub-populations by the type of cuisine as follows:

*Table 1: Sample Composition*

<b>Ethnic group</b>	<b>European group</b>	<b>Anglo/Franco group</b>
50	28	21

By implementing a sampling ratio of 30:100 when determine the sample size the researcher has made an attempt to reduce the sampling error. Even though, The Restaurants Guide, included in the West London Yellow Pages directory is assumed to be not entirely representative, by adopting stratified random sampling the researcher has made an attempt to introduce an explicit scientific model. The Kruskal-Wallis test, adopted for this study accommodated the possibility of small samples.

Albeit ethnicity characteristics are not fully embraced in the sample of this study and the heterogeneous nature of the micro restaurant business makes it very hard to generalise the findings, nevertheless, this study is unique in terms of the chosen context.

The potential introduction of uncontrolled sample bias into test results is acknowledged. However, the use of the MSCEIT V2 test, which is not a self-report measure and based on performance measures, increases the reliability of the findings.

In order to ensure that the sample was not biased the participants were randomly allotted to groups by the lottery method. Therefore, the collected data met the assumption required for the non-parametric Kruskal-Wallis test where small participant numbers and unequal groups of participants are absolutely appropriate. Given the aims and objectives of this study, the owner-managers of the selected sample were then targeted.

The Kruskal – Wallis test examines the null hypothesis that the samples do not differ in mean rank for the criterion variable. Even though the Kruskal-Wallis test does not tell us how the groups differed it takes rank size into account rather than just the above-below dichotomy of the median test, thus it is more powerful and preferable when its assumptions are met.

### **Limitations**

Whilst this paper sets out to address the issue of EI in the cultural setting of the MRS it does have some limitations.

Although the sample size in this study was considered to be adequate, a larger sample size could have allowed for more power and also would increase the confidence in the findings. Furthermore the potential introduction of uncontrolled sample bias into test results is acknowledged

As noted above, the researcher has concentrated on three cultural groups: Anglo/Franco group, European, and Ethnic and acknowledges that the ethnicity variable is not fully embraced

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## Results

The raw scores of participants were computed into SPSS and subsequently analysed by means of quantitative analysis. The descriptive statistic for each ethnic group was reported. The Kruskal-Wallis test was conducted with the aim of measuring whether EI scores differ with respect to ethnicity in order to assist in answering the research question.

*Table 2: The Kruskal-Wallis test output*

		Ethnic grouping		N	Mean Rank
Score	Ethnic group	15		13.53	
	European group	8		15.38	
	An Fr	6		18.17	
	Total	29			

	Score
Chi-Square	1.290
df	2
Asymp. Sig.	.525

a Kruskal Wallis Test

b Grouping Variable: ethnic grouping

## Findings of the quantitative analysis

### *Participants profile and descriptive statistics*

There were 29 owners-managers of the micro restaurants participating in the study: 66% of the sample was males and 34% females. The MSCEIT V.2 scores are standardized like traditional intelligence scales so that the average score is 100 and the standard deviation is 15 (Mayer et

al., 2002). The mean, median, and standard deviation for the total EI of the sample were 84, 83, and 14 respectively.

The following table illustrates the Mean, Median, and Standard Deviation for each ethnic group:

*Table 3: Mean, Median, and Standard Deviation for each ethnic group*

Ethnic Group	Mean	Median	SD
Ethnic	82	78	17
European	84	82	12
Anglo/Franco	89	91	12

An examination of box and whisker plots revealed that the distribution of the total EI scores was slightly positively skewed. In such a case it is advised that the median be used as the scores in the extended tail might be distorting the mean (Dancey and Reidy, 2004).

The table below sums up the descriptive statistics for dependent and independent variables

*Table 4: Descriptive statistics for dependent and independent variables*

Variable	Mean	Median	Mode	Standard deviation	Skewness
Age	38	39	44	8	.196
Gender			male		
Ethnicity			Asian		
EI score	84	83	74	14	.145

Mean and median of the EI scores with relation to age are demonstrated on the following table:

*Table 5: Mean and median of the EI scores with relation to age of participants*

Age	Mean	Median	Standard Deviation
20-30	83	82	12
31-40	75	75	11
41-50	90	93	16

51 and over	93	93	8
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### **The Kruskal-Wallis test**

The raw scores obtained on the MSCEIT V.2 were used to measure the extent to which EI scores differ with respect to ethnicity. As noted, sample size was rather small and groups of participants were unequal which meant that the scores on the dependant variable (EI score) were unlikely to be normally distributed. The distribution of the total EI scores has a skewness value of 0.145, which indicates a slight positive skew, therefore, the use of non-parametric Kruskal-Wallis test which does not make an assumption of normally distributed data was justified. The formula for Kruskal-Wallis is based on the ranks of the scores and the scores are ranked across the groups. In the case of this study the intact groups were: Ethnic (coded 1), European (coded 2), and Anglo/Franco (coded 3).

### **Hypothesis**

The hypotheses were two-tailed and stated as follows:

H0: there are no differences between the means of the samples

HA: there is a difference between the means of the samples.

As demonstrated above the participants from the ethnic group had the least total EI score (median 77.9) and the participants from Anglo/Franco group had the most (median 90.76, though it should be noted that the number of participants from Anglo/Franco group was the smallest). Results gave a chi squared of 1.290 with degrees of freedom = 2, and with an associated probability value of 0.525.

The Right –Tail Probability (0.525) is the probability of the differences between the data sets occurring by chance. Since it was considerably higher than 0.05, it was concluded that there were no differences in EI scores with respect to ethnicity. Thus, the Ho hypothesis must be accepted and HA hypothesis rejected.

### **Discussion of the quantitative findings**

The participants of this study took Version 2 of the MSCEIT. The scoring guidelines from Multi-Health Systems indicated four general groupings for emotional intelligence: (a) scores below 85 indicated a need for improvement, (b) 85-114 reflect normative scores and moderate skills, (c) enhance skills are reflected in scores of 115-130, (d) and scores greater than 130 indicate exceptional skill (Mayer et al., 2002). Note that the sample mean of 84 is clearly below the average score of 100. However, you cannot, possibly, generalise from this finding as the way of estimating the population mean is to calculate the means for a number of samples and then calculate the mean of these sample means.

The Kruskal-Wallis test has provided an alternate statistical procedure for testing whether the EI construct generalizes across cultural groups and has therefore assisted in answering the research question. The results of the test produced a chi squared of 1.290 with degrees of freedom = 2, and with an associated probability value of 0.525. Since it was considerably

higher than 0.05 hence, it was concluded that there are no differences in EI scores with respect to ethnicity. It is noteworthy that no pattern of differences in EI scores with respect to ethnicity was also found in the study by Mayer et al. (2003) which also used MSCEIT V.2 to test EI.

### **Research Question and data interpretation**

*Does the EI construct generalize across cultural groups?*

Interestingly, no differences in EI scores were found with regard to ethnicity. The result of Kruskal-Wallis gave a chi squared of 1.290 with degrees of freedom = 2, and with an associated probability value of 0.525. Since it was considerably higher than 0.05, it was concluded that there are no differences in EI scores with respect to ethnicity. Therefore, the outcome of this research is that the EI construct generalizes across the cultural groups studied. This result is congruent with the findings of Mayer et al. (2003) who used the same instrument to test the EI, the MSCEIT V.2 and found no pattern of differences in EI scores with respect to ethnicity.

### **Conclusion**

This study aimed to gain a better understanding of the link between EI, ethnic characteristics and leadership behaviour in the context of the MRS. The research aimed to investigate the emotional expressiveness of owner-managers in different cultural settings and to examine to what extent the concept of EI differs depending on these settings.

The outcome of the data analysis demonstrated that work relationships in micro restaurant businesses are, as advocated by the empirical research (Yousef, 1998; Craig & Lindsay, 2002; Nolan, 2002; Peters, 2005), extremely emotionally complicated. Given the complex conceptual backcloth of EI the owner-managers perceived the concept as emotions and human ability to control emotions (rather than intelligence). The concept was also seen as an innate ability, which may lend support for an ability model of EI. No evidence has been found on whether the perception of EI concept subjects to the measured level of EI and furthermore, a value stance that high EI is good and low EI is bad rather vague. No differences in EI scores were found with regard to ethnicity.

It has been argued that service quality is a vital characteristic to competitive success (Nolan, 2002; Peters, 2005). This paper is, therefore relevant in enriching the understanding of the benefits of EI which appear to reside in raising awareness of emotional issues in the multicultural environment of micro restaurant businesses.

The aim of this study was to investigate the relatively new EI concept and its link to ethnic characteristics in the unique context of the micro restaurant business. The EI construct has never been analysed in this unique contextual setting, despite small businesses being the most commonly found hospitality enterprises. Moreover, this paper has made an attempt to contribute to the theory and concept of cultural boundaries and the skills that fall therein.

It has been argued that service quality is a vital characteristic to competitive success (Nolan, 2002; Peters, 2005). This paper is, therefore relevant in enriching the understanding of the benefits of EI which appear to reside in raising awareness of emotional issues in the multicultural environment of micro restaurant business where the manager-owners are

demonstrated to have a great influence over the motivation of employees. The field would also benefit from future research into the interaction of IE and the performance of leaders from broad ethnic backgrounds.

## **Bibliography**

Anastasy A., & Urbina S., (1997). *Psychological Testing Upper Saddler River*. NJ: Simon & Schuster

Anderson, V., (2004). *Research methods in Human Resource Management*. London: CIPD Publishing

Anderson, V., Sweeney, D. and Williams, T.A. (1993). *An Introduction to Management Science*, U S: South Western College Publishing

Antonakis J., (2003). Why EI does not predict leadership effectiveness: a comment on Prati, Douglas, Ferris, Ammeter, & Backley. *International Journal of Organisational Analysis*, 11(4) pp. 355-361

Antonakis J., (2004). On why EI will not predict leadership effectiveness beyond IQ or the Big Five: an extension and rejoinder. *Organisational Analysis*, 12(2), pp. 171-180

Antonakis J., Avolio B., & Sivasubramaniam N., (2003). Context and leadership: an examination of the nine-factor Full-Range Leadership Theory using the Multifactor Leadership Questionnaire (MLQ Form 5x). *Leadership Quarterly*, 14, pp.261-295.

Ashkanasy N., Hartel C., & Daus C., (2000). *Emotions in the workplace: research theory and practice*. Westport: Quorum Books

Ashkanasy N., Jordan P., & Hartel C., (2002). EI as a moderator of emotional and behavioural reactions to job insecurity. *The Academy of Management review*, 27(33), pp.361-372

Bar-On R., (1997). *The Emotional Intelligence Inventory Technical Manual*. Toronto: Multi-Health Systems

Bar-On R., (2005). *The Bar-On model of emotional-social intelligence (ESI)*. *Issues in Emotional Intelligence Consortium for Research on Emotional Intelligence in Organizations October, 2005*, [online], Available: [www.eiconsortium.org](http://www.eiconsortium.org)., Accessed: 10/11/06.

Bardzil, P., & Slaski, M., (2003). Emotional Intelligence: fundamental competencies for enhanced service provision. *Managing Service Quality*, 13(2), pp. 97-104

Barret, G., (2001). A reconsideration of testing for competence rather than intelligence. *American Psychologist*, 46(2), pp. 1012-1024

Basu, A., (2004). Entrepreneurial aspirations among family business owners: an analysis of ethnic business owners in the UK. *International Journal of Entrepreneurial Behaviour and Research*, 10(1), pp. 12-33.

Beaver, G., & Prince, C., (2004). Management, strategy and policy in the UK small business sector: a critical review. *Journal of Small Business and Enterprise Development*, 11(1), pp. 34-49.

- Bharwani, S., & Jauhari, V., (2013). An exploratory study of competencies required to co-create memorable customer experiences in the hospitality industry. *International Journal of Contemporary Hospitality Management*, 25(6), pp. 823-843.
- Birch, A., & Malim, T., (1997). *Research methods and statistics in psychology*. Hampshire: Macmillan Press.
- Brocke, J.V., Sinni, T., (2011). Culture in Business Process Management: a literature review. *Business Process Management Journal*, 17(2), pp. 357-378.
- Callahan, J., Hasler, M., & Tolson, H., (2005). Perceptions of emotion expressiveness: gender differences among senior executives. *Leadership and Organisational development journal*, 26(7), pp.512-526.
- Carmeli, A., (2003). The relationship between Emotional Intelligence and work attitudes, behaviour and outcomes: An examination among senior managers. *Journal of Managerial Psychology*, 18(8), pp. 788-813.
- Caruso, D., Mayer, J., & Salovey, P., (2002). *Emotional Intelligence and emotional leadership*. [cited in Riggio S., Murphy S., and Pirozzolo F., (2002) *Multiple Intelligence and Leadership*: Erlbaum]
- Clark, M., Riley, M., Wilkie, E., & Wood, R., (1998). *Researching and writing dissertations in hospitality and tourism*. London: Thomson Learning.
- Collis, J., & Hussey, R., (2003). *Business Research* (2nd ed.). Hampshire: Palgrave Macmillan.
- Conte, J., (2005). A review and critique of EI measures. *Journal of Organizational Behavior*, 26, pp.433-440.
- Craig, J., & Lindsay, N., (2002). Incorporating the family dynamic into the entrepreneurship process. *Journal of Small Business and Enterprise Development*, 9(4) pp. 416-430.
- Dancey, C., & Reidy, J., (2004). *Statistics without maths for psychology using SPSS for Windows* (3rd ed.). London: Prentice Hall.
- Daus, C., & Ashkanasy, N., (2003). Will the real EI please stand up? On reconstructing the EI debate. *Industrial-Organisational Psychologist*, 41(2), pp.69-72.
- Daus, C., & Ashkanasy, N., (2005). The case for the ability-based model of EI in organisational behaviour. *Journal of Organisational Behaviour*, 26, pp.453-466.
- Department of Trade and Industry (1999). Size distribution, growth potential and the job contribution of UK firms. *International Small Business Journal*, 6(1), pp.31-55.
- Dey, I., (1993). *Qualitative Data Analysis: A User-friendly guide*. London and New-York: Routledge.
- Diamantopoulos, A., & Scheggelmich, B., (2000). *Taking fear out of data analysis*. London: Thomson Learning.
- Elfenbein, H.A., Polzer, J.T., & Ambady, N., (2007). Can teams have emotional skills? The case of recognizing others' emotions. *Working paper*, University of California, Berkeley, CA.



- Erez, M. & Earley, P.C. (1993). *Culture, Self-Identity and Work*, New York: Oxford University Press.
- Eurostat (2003). *SMEs in Europe: Competitiveness, Innovation and the Knowledge-driven Society*. Theme 4: Industry, Trade and Services Luxembourg: European Communities.
- Gabel-Shemueli, R., & Dolan, S., (2011). Do emotions matter? The role of emotional intelligence competences in cross-cultural adjustment for International assignment. *Management Research*, 9(3), pp. 207-229.
- Gardner L., & Stough C., (2002). Examining the relationship between leadership and Emotional Intelligence in senior level managers. *The Leadership and Organisational Development Journal*, 23(2), pp. 68-78.
- Gohm, C., (2004). Moving forward with Emotional Intelligence. *Psychological Inquiry*, 15 (3), pp. 222-227.
- Goleman, D., (1998). *Working with Emotional Intelligence*. New York: Bantam.
- Goleman, D., (2003). Comment on D., Caruso, *Defining the Inkblot Called Emotional Intelligence*. Issues in Emotional Intelligence Consortium for Research on Emotional Intelligence in Organizations, October, 2003. [Online], Available: [www.eiconsortium.org](http://www.eiconsortium.org), Accessed: 06/11/06.
- Gregory, R., (1996). *Psychological Testing: History, principles, and applications* (2nd Ed.) Boston: Allyn & Bacon.
- Hughes, M., Patterson, L., & Terrell, J., (2005). *Emotional Intelligence in action: Training and Coaching Activities for leaders and managers*. San-Francisco: Pfeiffer.
- Johns, N., & Lee-Ross, D., (1998). *Research methods in service industry management*. London and New-York: Cassell.
- Keenoy T., Oswick C., & Grant D. (2003). Is EI a Viable Concept? *Academy of Management Review*, April, pp.192-194.
- Kerr, R., Garvin, J., Heaton, N., & Boyle, E., (2005). Emotional Intelligence and leadership effectiveness. *The Leadership and Organisational Development Journal*, 27(4), pp. 265-279.
- Khani, M.K., & Lalardi, M.N., (2012). Emotional Intelligence and Organizational Commitment between Hotel Staff in Tehran, Iran. *American Journal of Business and Management*, 1(2), pp. 54-59.
- Kim, T., Yoo, J., Lee G., & Kim, J., (2012). Emotional intelligence and emotional labor acting strategies among frontline hotel employees. *International Journal of Contemporary Hospitality Management*, 24(7), pp. 1029-1046.
- Kroeber, A.L., & Kluckhohn, C., (1952). *Culture: A Critical Review of Concepts and Definitions*, Peabody Museum: Cambridge, MA.
- Lam, C., & O'Higgins, E., (2012). Enhancing employee outcomes. The interrelated influences of managers' emotional intelligence and leadership style. *Leadership and Organisational Development Journal*, 33(2), pp. 149-174.

- Lam, W., & Chen, Z., (2012). When I put on my service mask: determinants and emotional labor among hotel service providers according to affective event theory. *International Journal of Hospitality Management*, 31(1), pp. 3-11.
- Langhorn, S., (2004). How Emotional Intelligence can improve management performance. *International Journal of Contemporary Hospitality Management*, 16(4), pp. 220-230.
- Lashley, C., (2008), *Marketing hospitality and tourism experiences*, in Oh, H., & Pizam, A., (Eds), *Handbook of Hospitality Marketing Management*, Butterworth-Heinemann, Oxford, pp. 3-31.
- Leban, W., & Zulauf, C., (2004). Linking Emotional Intelligence abilities and transformation leadership styles. *The Leadership and Organisational Development Journal*, 25(7), pp. 554-564.
- Lillis, M.P., & Tian, R. G, (2009). Cross-Cultural Communication Emotional Intelligence: Inferences from case studies of gender diverse groups. *Marketing Intelligence and Planning* 27(3), pp. 428-438
- McSweeney, B., (2002). Hofstede's Model of National Cultural Differences and Their Consequences: AA Triumph of Faith – a Failure of Analysis. *Human Relations*, 55(1), pp.89-118.
- Malim, T., & Birch, A., (1997). *Research Methods and Statistics*. Hong Kong: Introductory Psychology Series.
- Matsumoto, D., (1993). Ethnic differences in affect intensity, emotion judgments, display rule attitudes and self-reported emotional expression in an American sample. *Motivation and Emotion*, 17, pp.107–123.
- Matthews, G., Roberts, R., & Zeidner, M., (2004a). *Emotional Intelligence: Science and Myth*. London: MIT Press.
- Matthews, G., Roberts, R., & Zeidner, M., (2004b). Seven Myths about Emotional Intelligence. *Psychological Inquiry*, 15(3), pp. 179-196.
- Mayer, J., Caruso, D., & Salovey, P. (2000). *Selecting a measure of emotional intelligence: The case for ability measures*. [cited in Bar-On R., & Parker J., (2000) *The handbook of emotional intelligence*. San Francisco: Jossey-Bass].
- Mayer J., Caruso D., Salovey P., & Siterenios G. (2003). Measuring Emotional Intelligence with the MSCEIT V2.0. *Emotions*, 3(1), pp. 97-105.
- Mayer, J., Salovey, P., & Caruso, D., (2002). *MSCET user's manual*. Toronto: Multi-Health Systems.
- Mayer, J., Salovey, P., & Caruso, D., (2004). A further considerations of the issues of Emotional Intelligence. *Psychological Inquiry*, 15(3), pp. 249-255.
- Mayer, J., Salovey, P., & Caruso, D., (2002). Relation of an Ability Measure of EI to Personality. *Journal of personality assessment*, 79(2), pp.306-320.
- Mayer, J., Salovey, P., Caruso, D., & Sitarenios, G. (2001). Emotional Intelligence as a

standard intelligence. *Emotions*, 1, pp. 232-242.

Mayer, J., Salovey, P., Caruso, D., & Sitarenious, G. (2003). Measuring EI with the MSCEIT V.2. *Emotions*, 3(1), pp.97-105.

Myers, J., & Tan F. (2002). Beyond Models of National Culture in Information Systems Research. *Journal of Global Information Management*, 10(1), pp 24-32.

Nazarian, A., & Atkinson, P., (2013). How size affects organizational culture in a national context. *La Pensee Journal*, 75(12), pp. 358-373.

Nolan, C., (2002). Human Resource Development in the Irish hotel industry: the case of the small firm. *Journal of European Industrial Training*, 26(2), pp 88-99.

Oatley, K., (2004) Emotional Intelligence and the Intelligence of Emotions. *Psychological Inquiry*, 15(3), pp. 216-238.

Ones, D., & Viswesvaran, C., (1998). Gender, age, and race differences on overt integrity tests: results across four large scale job applicant datasets. *Journal of Applied Psychology*, 82, pp.26-34.

Parker, D., Saklofske, D., Shaughnessy, P., Huang, S., Wood, L., & Eastabrook, J., (2005). Generalizability of the EI construct: A cross-cultural study of North American aboriginal youth. *Personality and Individual differences*, 39, pp.215-227.

Peltokorpi, V., (2008). Cross-Cultural adjustment of expatriates in Japan, *International Journal of Human Resource Management*, 19(9), pp.1588-1606.

Perez, J., Petrides, K., & Furnham, A., (2006). Measuring trait EI. *Journal of applied social psychology*, 12, pp.124-139.

Peters, M., (2005). Entrepreneurial skills in leadership and human resources management evaluated by apprentices in small tourism businesses. *Education and Training*, 47(8/9), pp. 575-591.

Prati, L., Douglas, C., Ferris, G., Ammeter, A., & Backley, M., (2003). The role of EI in team leadership: reply to the critique by Antonakis. *International Journal of Organisational Analysis*, 11(4), pp.363-369.

Quinn, J., (1992). The small firm in the hospitality industry. *International Journal of Contemporary Hospitality Management*, 1(1), pp. 11-14.

Rahim, M., Afzalur, & Marvel, Matthew, R., (2011). The Role of Emotional Intelligence In Environmental Scanning Behavior: A Cross-Cultural Study. *Academy of Strategic Management Journal*. 10(2), pp 83-103.

Roberts, R., (2001). *Review of handbook of Emotional Intelligence*. New-York: Cambridge University Press.

Roberts, R., Zeidner, M., & Matthews, G. (2001). Does EI meet traditional standards for intelligence? Some new data and conclusions. *Emotions*, 1, pp.196-231.

Rooy, D., Alonso, A., & Viswesvaran, C., (2005). Group differences in emotional intelligence

- scores: theoretical and practical implications. *Personality and Individual Differences*, 38, pp.689-700.
- Rosete, D., & Ciarrochi, J., (2005). Emotional Intelligence and its relationship to workplace performance outcomes of leadership effectiveness. *Leadership and Organisational Development Journal*, 26(5), pp. 388-399.
- Rugman, A., & Collinson, S., (2012). *International business*. 1st ed. Harlow, England: Pearson.
- Salovey, P., & Mayer, J., (1990). Emotional Intelligence. *Imagination, Cognition and Personality*. 9, pp. 185-211.
- Schmitt, N., Rogers, W., Chan, D., Sheppard, L., & Jennings, D., (1997). Adverse impact and predictive efficiency of various predictor combinations. *Journal of applied psychology*, 82, pp.719-730.
- Scott-Halsell, S.A., Blum, S.C., & Huffman, L., (2008). A study of emotional intelligence levels in hospitality industry professionals, *Journal of Human Resources in Hospitality & Tourism*, 7(2), pp. 135-152.
- Seyal, A.H., Afzaal, T., & Rajeskar, J., (2011). A Preliminary Examination of the Relationship between Emotional Intelligence, Leadership Style, Personality and Organizational Culture: Evidence from Bruneian SMEs. In the Proceedings of 10th *International Conference of the Academy of HRD (Asia Chapter)*, Kuala Lumpur, Malaysia (December, 3rd to Dec 6th 2011).
- Sternberg, R., (2000). *Handbook of Intelligence*. New-York: Cambridge University Press.
- Storey, D.J., (1994). *Understanding the Small Business Sector*. London: Routledge.
- Swidler, A., (1986). Culture in action: Symbols and strategies. *American Sociological Review*, 51 (2), pp.273-286.
- The Restaurant Association (2002). *Restaurant Industry Gold Standard Report*, London.
- Van Rooy, D., & Viswesvaran, C., (2004) EI: a meta-analytic investigation of predictive validity and nomological net. *Journal of Vocational Behaviour*, 65, pp.71-95.
- Woodruff, C., (2001). Promotional Intelligence. *People Management*, January, 11, pp. 26-29.
- Yousef, D., (1998). Correlates of perceived leadership style in a culturally mixed environment. *The Leadership and Organisational Development Journal*, 19(5), pp. 275-284.
- Zadel, A., (2008). Do Emotionally Intelligent Leaders Have More Satisfied Employees? *International Journal of Management and Enterprise Development*, 5(5), pp. 590-608.
- Zeidner, M & Matthews, G., (2004). Emotional Intelligence. *Leadership and Organisational Development Journal*, 21(6), pp. 122-142.
- Zeidner, M., Matthews, G., & Roberts, R., (2001). Slow down, you are moving too fast: EI remains an “elusive” intelligence. *Emotions*, 1, pp. 265-275.