

## **Emotional Intelligence and Emotional Labour: A Comparison Study Using the Emotional Capital Report (ECR)**

Martyn Newman  
*Sheffield Hallam University*  
Kenneth H. Smith  
*Australian Catholic University*

### **Abstract**

This study examined the relationship of emotional intelligence (EI) to jobs requiring emotional labour in a sample of 6,874 participants from eleven countries or geographical regions. In particular, the current study examined the relationship of a mixed model of EI, as measured by the Emotional Capital Report (ECR), to emotional labour identified in recent literature as performed by workers in three types of service occupations, customer service, social control and caring. Previous research had reported that individuals high in EI may be more likely to perform well in jobs requiring emotional labour and, as such, emotional labour was an important moderator of the EI-performance relationship. Results of this study supported the existence of a moderate relationship between a mixed model of EI and emotional labour and thus provided further support for this claim. The findings suggest that where jobs require high emotional labour, EI is likely to assist individuals to know both when to perform emotional labour and how to alter emotional behavior to meet organizational goals. Furthermore, when service occupations were examined for the type of emotional labour performed, those in customer service occupations produced significantly higher scores on 8 out of 10 ECR subscales. Taken together, the findings suggest that when considering the EI-performance link it is important to consider both the occupational context as well as the emotional intelligence of individuals. Limitations of the study and future directions are discussed, along with practical implications for both researchers and human resource personnel seeking to improve the job related performance of employees.

**Keywords:** emotional intelligence; Emotional Capital Report; emotional labour; service occupations

There has been considerable interest in emotional intelligence (EI) in both the popular and academic literature in recent years and EI has received substantial attention in applied business settings (Antonakis, Ashkanasy, & Dasborough, 2009; Brackett, Mayer, & Warner, 2004; Law, Wong, & Song, 2004; Mayer, Roberts, & Barsade, 2008; O'Boyle, Humphrey, Pollack, Hawver, & Story, 2011; Offermann, Bailey, Vasilopoulos, Seal, & Sass, 2004). This has occurred in parallel with an interest in the broader role of affect and emotions in organizational behavior (Gooty, Connelly, Griffith, & Gupta, 2010) and a closely related concept, emotional labour (Ashforth & Humphrey, 1993; Grandey, 2000; Hochschild, 1983). Defined as 'the process of regulating both feelings and expressions for organizational goals' (Grandey, 2000, p. 97), emotional labour has been linked to emotional intelligence (Joseph & Newman, 2010; O'Boyle et al., 2011; Humphrey, Pollack, & Hawver, 2008). This is perhaps not surprising given emotional labour occurs when employees must alter their emotional expressions in order to meet the display rules of the organization (Ashforth & Humphrey, 1993; Diefendorff & Richard, 2003; Diefendorff, Croyle, & Gosserand, 2005; Hochschild, 1983; Pugh, 2001; Rafaeli & Sutton, 1990). Competencies associated with EI such as the ability to recognize one's own emotional experience and the ability to recognize the emotional experience of others' may help employees know when they need to alter their emotional expressions. Given that emotional labour theory suggests that a job's demands for emotional labour will influence individual performance in certain roles, this paper aims to examine the relationship of EI to jobs requiring emotional labour.

### ***Models of Emotional Intelligence***

Despite its popularity, EI has remained controversial with respect to both construct and criterion-related validity (Cherniss, 2010; Dulewicz & Higgs, 2000; Landy, 2005; Locke, 2005) and the field still lacks a universally accepted definition. In the interests of achieving greater conceptual clarity, some researchers have argued that EI should be distinguished according to two discrete models: (a) an 'ability-based' model that proposes that EI is a type of intelligence or aptitude and (b) a mixed (traits with abilities) model that includes a combination of intellect and various measures of personality and affect (Petrides & Furnham, 2006). Others suggest that EI should be classified by the manner in which it is assessed. Ashkanasy and Daus (2005), for example, in their review of the extant data on EI classified the research into three streams: Stream 1 comprised a model proposed by Mayer and Salovey (1997) who put forward a theory of EI framed within a model of intelligence. This model viewed overall EI as joining abilities from four areas: (1) accurately perceiving emotion, (2) using emotions to facilitate thought, (3) understanding emotion, and (4) man-

aging emotion. These abilities are best measured through performance tests such as the Mayer-Salovey-Caruso Emotional Intelligence Test-MSCEIT (Mayer, Salovey, & Caruso, 2002). Stream 2 included various self-report and multi-rater report instruments based on the Mayer-Salovey model such as measures by Jordan, Ashkanasy, Härtel, and Hooper (2002), Schutte et al., (1998), and Wong and Law (2002). Stream 3 comprised expanded models of emotional intelligence that are referred to as 'mixed models' because they encompass components not included in Salovey and Mayer's definition and contain a mixture of personality-type items, competencies and behavioural preferences. They included models developed by Boyatzis, Goleman, and Rhee, (2000) who designed a model to encompass the social and emotional competencies that are linked to workplace performance. These competencies are measured by the Emotional Competence Inventory-ECI (Boyatzis, Goleman, & Hay/McBer, 2008) and more recently the Emotional and Social Competence Inventory (ESCI). Stream 3 also included a model based on work of Bar-On (1988) who placed EI within the context of personality theory as a type of wellbeing comprised of a mixture of traits and skills and measured by the Emotional Quotient Inventory-EQI (Bar-On, 1997).

In their review Ashkanasy and Daus (2005) failed to include a number of additional models of EI that may also be described as mixed models. For example, Petrides and Furnham (2003) defined a model from within personality theory as 'trait emotional intelligence'. Trait EI concerns behavioural dispositions and self-perceived abilities with reference to personality hierarchies and is meant to include all 'personality facets that are specifically related to affect' (Petrides, Pita, & Kokkinaki, 2007, p. 274).

More recently, in an approach similar to Boyatzis, Goleman and Rhee (2000), Newman and Purse (2007) described a model that identified the emotional and social competencies linked to success in leadership and various professional roles – the emotional capital model. Designed as a consensus model that includes a number of competencies found in earlier models, the emotional capital model redefined these in terms of the social and emotional competencies thought to be predictive of success in a range of management, leadership and professional roles. Research in applied business settings using this model culminated in the publication of the Emotional Capital Report-ECR (Newman & Purse, 2007).

Ashkanasy and Daus (2005) argued that it was important to distinguish among the three streams because a lot of the criticism directed at the field of EI research – such as overlaps between EI measures and

other personality traits – are inappropriately directed at all three streams of research when most of the overlaps occur primarily within the third stream of research. There is growing empirical evidence supporting this distinction and its usefulness (Joseph & Newman, 2010; Martins, Ramalho, & Morin, 2010; O’Boyle, Humphrey, Pollack, Hawver, & Story, 2011; Van Rooy, Viswesvaran, & Pluta, 2005). Although Ashkanasy and Daus (2005) suggested that mixed models may have conceptual overlaps with existing personality measures, they acknowledged that they do an excellent job of predicting performance. Similarly, O’Boyle et al. (2011) in the most recent meta-analysis that included a much larger sample size than Joseph and Newman also concluded that stream 2 and 3 had the largest incremental validity beyond cognitive ability and the Five Factor Model of personality (FFM).

In addition to establishing the predictive validity of EI the findings also illustrated the similarities and differences of the three EI streams. As expected, stream 1 ability measures were more closely related to cognitive intelligence and also had the lowest correlations with the FFM thus supporting the conceptualization of these measures as a type of intelligence test. As O’Boyle et al. (2011) suggested, these differences have important implications in terms of the definitions and underlying constructs for the three streams of EI research. Since stream 3 researchers are increasingly defining their measures in terms of traits, competencies, and skills instead of intelligences, these results are again consistent with how these measures are defined. Indeed, concerned that these broader mixed models of EI don’t qualify strictly as EI, Cherniss (2010) has gone further suggesting a distinction be made between EI and emotional and social competencies (ESC) that are clearly linked to EI. This position appears similar to Goleman’s (1998) original contention that social and emotional competencies are ‘learned capabilities’ based on emotional intelligence that results in outstanding performance at work (Goleman, 1998, p. 24).

According to both Cherniss (2010) and Goleman (1998), an advantage of the broader competency based models is that they consolidate many emotional and social abilities that are important for personal and professional success into a single framework. Defining emotional competencies as ‘learned capabilities’ also has important implications for management and organisational behaviour. It suggests that ESCs can be developed within specific training programs to improve organisational performance and success. There is a growing body of research linking EI defined as such to success in the workplace (Bachman, Stein, Campbell, & Sitarenios, 2000; Chia, 2005; Newman & Purse, 2007; Petrides & Furnham, 2006). In particular, an evolving research literature in social and organizational psychology suggests that EI skills are

important for employees' emotion-related processes and outcomes at different levels of management (Ashkanasy, Härtel, & Daus, 2002).

In summary, although debate remains among EI researchers as to which of the three different streams of EI measure intelligence, there is solid evidence that all three types of measures predict job performance. According to O'Boyle et al. (2011), all three streams of research measure at least to some extent the core concepts behind EI, and 'it is likely that the ability to recognize emotions in one's self and in others contributes to effective social interaction, as does the ability to regulate one's own emotions' (p. 793).

### **Emotional Labour**

The ability to recognize and regulate emotion at work has been described by Hochschild (1983) as emotional labour. She argued that employees perform emotional labour when they express socially desired emotions as part of their job role and jobs that require emotional labour, such as service workers, have three things in common: (1) they require face-to-face or voice-to-voice contact with the public; (2) they require the worker to produce an emotional state in the customer; and (3) they allow the employer, through training and supervision, to exercise some control over the emotional life of employees. Emotional labour is also performed in other settings, such as health care, where workers are expected to show sympathy or a variety of other emotions.

Hochschild (1983) argued that organizations developed what she called 'feeling rules' that specified the emotions that employees should feel (Humphrey et al., 2008). However, Ashforth and Humphrey (1993) broadened the scope of Hochschild's conception of 'feeling rules' and suggested that emotional labour occurs when employees must alter their emotional expressions in order to meet the observable 'display rules' of the organization. Despite this emphasis on the external expression of emotion through display rules, Humphrey et al., (2008) and others who refer to the term 'display rules' have also recognized that, in order to display the appropriate emotions, employees might also have to regulate their internal emotional states.

Hochschild (1983) suggested that when employees change their external emotional expressions but make no attempt to feel the emotions that they are displaying, they are expressing surface acting. In contrast, when they make the effort to in fact feel the emotions they want to display, they are expressing deep acting. In addition, Ashforth and Humphrey (1993) argued that employees also perform emotional labour in a third way, specifically, through spontaneous and genuine emotion; a position supported by Diefendorff et al., (2005).

Although Hochschild (1983) viewed emotional labour demands as a characteristic of particular occupations such as restaurant workers, cashiers, hospital workers, bill collectors, counselors, secretaries, and nurses; others have argued that emotional labour may vary in degree across occupations (Diefendorff & Richard, 2003). Accordingly, display rules have been conceptualized not only as role requirements of particular occupational groups, but also as interpersonal job demands which are shared by many kinds of occupations.

Grandey, Diefendorff, and Rupp (2013) consider emotional labour as existing on a continuum ranging from pure emotional labour in which all of Hochschild's (1983) stated attributes are present, to the emotional regulation context on the other end in which none of the stated attributes are present. They argue that emotional labour is present when 'emotional regulation is performed in relation to job-based requirements in order to produce emotion toward – and to evoke emotion from – another person to achieve organizational goals.' (p. 18).

In the main, emotional labour has been studied among three types of service workers: (1) customer service (2) caring, and (3) social control jobs. In customer service jobs, emotional display rules normally require 'service with a smile' (Pugh, 2001; Van Dijk & Kirk-Brown, 2006). According to Humphrey et al. (2008) these jobs generally require the expression of friendly, positive emotions that most people like expressing and experiencing, although sometimes the hectic work pace makes these displays difficult. In other words, although normally these emotions are expressed naturally, stressful external working conditions may sometimes require employees to have to fake their emotional expressions. Again, according to Humphrey et al., in caring occupations such as nursing, employees have to display emotions such as sympathy and concern that are associated with sad and stressful life events. The third category, social control, includes occupations such as law enforcement, customs inspectors, and bill collectors among others. These roles require a certain degree of emotional self-control while communicating in a straightforward and assertive manner. Accordingly, the type of emotional labour that employees are required to display varies by the type of service job they must perform. A number of researchers have reported that emotional labour plays an important role in various organizational outcomes including job satisfaction, customer satisfaction, and employee morale (Psilopanagioti, Anagnostopoulos, Mourtou, & Niakas, 2012; Larson & Xin, 2005; Pugh, 2001; Lopez, 2006; Henderson, 2001).

### **Emotional Intelligence and Emotional Labour**

The ability to recognize emotions in one's self and in others, and the ability to regulate one's own emotions are core concepts within all



streams of EI. As such, these abilities may help one know when to perform emotional labour, just as the ability to recognize one's own emotions may help employees know when they need to pay attention to altering their emotional expressions (O'Boyle et al., 2011). Accordingly, individuals high in EI may be more likely to perform well in jobs requiring emotional labour as compared with individuals lower in EI.

A number of recent studies have explored the relationship between EI and jobs requiring emotional labour. Brotheridge (2006) examined how EI related to emotional labour and situational demands. Workers with higher levels of emotional intelligence were found to be more likely to perceive the need to frequently display emotions as part of their work role and perform deep acting in response to these situational demands. Brotheridge concluded that, 'the key role of emotional intelligence seemed to be as a predictor of the perceived situational demands, which, in turn, predicted the nature of emotional labour that was performed' (p. 139). Additionally, as reported earlier, Joseph and Newman (2010) in their recent meta-analysis examined the ubiquity of EI as a precursor to job performance based on the notion of emotional labour. They reported that when EI-performance studies were split into two based on emotional labour requirements of certain occupations, post hoc analysis revealed that emotional labour was an important moderator of the EI-performance relationship, i.e., that EI was a better predictor of performance for occupations that primarily involved emotional labour. They also found that mixed EI showed greater promise for generalizable prediction of job performance.

Although Joseph and Newman (2010) provided some initial evidence for the relationship of emotional labour as a moderator of EI and performance they remarked that, given the small sample sizes, more research needed to examine this more closely. Furthermore, they noted that they only examined emotional labour in jobs that required the display of friendly, positive emotional displays to customers in retail and similar settings. As noted earlier, Humphrey et al., (2008) pointed out that this is only one of three types of emotional labour performed by service workers: the other two include the caring occupations and those involved with social control. This observation led O'Boyle et al. (2011) to suggest 'the value of EI in these other job categories still needs to be studied' (p. 807). In response to the call for further research into the EL of service workers by Humphrey et al. (2008) and O'Boyle et al. (2011), this research examined the relationship of EI to all three types of emotional labour expressed by workers in three types of service occupations, customer facing, such as retail sales, caring occupations such as health care and social work, and roles involving social control such as law enforcement and customs inspector.

## **Method**

### ***Participants***

A total of 6,874 participants (4,220 males; 2,654 females) were recruited from eleven countries or geographical regions including: Australia/Oceania (34%), the United Kingdom (24%), Ireland (11%), India (9%), the Middle East (7%), Western Europe (7%), North America (3%), Asia (2%), South America (1%), Africa (1%), and Eastern Europe (1%). Participants were involved in various leadership development programs initiated by their respective organisations and consisted of Business, 5,322 (77.4%); Educational, 359 (5.2%); Medical, 292 (4.2%), and Other professionals, 901 (13.1%) who were regarded as having general or higher leadership responsibilities. Ages ranged from 18 to 75 ( $M = 41.62$ ,  $SD = 9.27$ ).

### ***Procedure***

To investigate the potential relationship between EI and the emotional labour requirements of the occupation, occupation descriptions were coded according to four items about emotional labour identified by Joseph and Newman (2010) and adapted from Grandey (2000) and Hochschild's (1983) criteria for emotional labour occupations. Each item was coded "yes" or "no". Of the 6,874 participants, 5,804 participants provided sufficient occupation description data to identify their specific role. The mean emotional labour score for each occupation title was calculated. Emotional labour ratings were bimodal and showed a natural breaking point at .5, making this an ideal cut-off for high versus low emotional labour occupations. 3,167 occupations were classified as high emotional labour. Examples of high emotional occupations included marketing and sales person, recruitment consultant, management consultant, travel agent, human resources professional. 2,637 occupations were classified as low emotional labour. Examples of low emotional labour occupations included law enforcement officer, military personnel, engineer, accountant, clerical work, government administrator, computer and IT technician, clerical work, financial services professional.

### **Measures**

#### ***Personal Description Questionnaire (PDQ).***

The PDQ gathered information regarding participants' nationality, occupation, and age.

#### ***Emotional Capital Report (ECR).***

Emotional intelligence was assessed using the Emotional Capital Report - ECR (Newman & Purse, 2007). The ECR is a 77-item self-report measure of the 10 emotional and social competencies that make up the emotional capital model of EI (Refer to Table 1 for details). Items



are brief sentences phrased in the first-person singular and responses are gathered on 5-point response format that offers five ranked values designed to indicate the subjective strength of the individual's responses including: 1 = "Very Seldom True of Me", 2 = "Seldom True of Me", 3 = "Sometimes True of Me", 4 = "Often True of Me", 5 = "Very Often True of Me". Items are summed to yield a Total EC score that reflects overall level of emotional capital, and scores on 10 emotional and social competencies: Self-Knowing, Self-Reliance, Self-Confidence, Straightforwardness, Self-Actualization, Relationship Skills, Empathy, Adaptability, Self-Control, and Optimism. The ECR includes a validity scale – the Positive Impact Scale – designed to detect response bias and increase the accuracy of interpretation. The ECR was published based on data from 3,240 individuals from professional occupations including business, law, medicine, and education, drawn from six geographic regions. Newman and Purse (2007) reported good internal consistency and test-retest reliability. Factor analyses also provided reasonable support for the inventory's hypothesised structure.

**Table 1. Emotional Capital Model Competency Definitions: The Competence To.**

---

<b>Self-Knowing</b>	–recognize how one's feelings and emotions impact on personal opinions, attitudes and judgements.
<b>Self-Reliance</b>	– take responsibility for oneself, back one's own judgments and be self-reliant in developing and making significant decisions.
<b>Straightforwardness</b>	–give clear messages and express one's feelings and points of view openly in a straightforward way and be comfortable challenging the views of others while demonstrating respect for their views.
<b>Optimism</b>	–sense opportunities be and resilient and focus on the possibilities of what can be achieved even in the face of adversity.
<b>Self-Actualization</b>	–manage one's reserves of emotional energy and maintain an effective level of work/life balance and thrive in setting challenging personal and professional goals.
<b>Self-Confidence</b>	–respect and like oneself and be confident in personal skills and abilities.
<b>Relationship Skills</b>	– establish and maintaining collaborative and rewarding relationships characterized by positive expectations.
<b>Empathy</b>	–understand other people's thoughts and feelings and create resonant emotional connections with others.
<b>Self-Control</b>	–remain patient and manage one's emotions well; restrain action and remain calm in stressful situations without losing control.
<b>Adaptability</b>	–adapt one's thinking, feelings and actions in response to changing circumstances and be receptive to new ideas and tolerant of others.

---

### Data Preparation and Analyses

All data analyses were conducted using IBM PASW Statistics Version 20 (IBM, 2011) and significant levels for the analyses were maintained at  $< .05$ . However, a Bonferroni adjustment of .0045 (.05/11

scales) was used to control for the inflated family-wise error rates that result from performing multiple tests on the same data.

Initial inspection of the data indicated some incomplete ECR data. No participant had more than 6 missing ECR items. As such, the missing item was replaced by the subscale item mean.

Detailed examination of the pattern of the missing data in the present study (*t* tests and correlations) indicated that the missing data can be categorised as ‘ignorable’ or ‘missing completely at random – MCAR’ (Little & Rubin, 2002). All negatively stated ECR items were recoded appropriately.

To investigate subscale relationships, Pearson’s correlation coefficient (Pearson’s *r*) were calculated. Cronbach’s alpha ( ) was utilised to assess the reliability of the ECR total and subscales items.

A series of independent-samples *t* tests, including Welch’s *t* test when equal variances cannot be assumed, were conducted to evaluate if participants’ ECR measures differed on the basis of emotional labour (high vs low).

Additionally, a series of one-way between group analysis of variance (ANOVA) were conducted to determine if high emotional labour participants’ ECR measures differed on the basis of three types of service occupations namely customer service, caring, and social control. As service occupation had three levels, post hoc paired-samples *t* tests were conducted to compare group means utilizing the LSD method for control of Type I error for pairwise comparisons. The LSD procedure is a powerful method to control for Type I errors across all pairwise comparisons if a factor has more than two levels (Tabachnick & Fidell, 2007).

## Results

Table 2 depicts the number of high and low emotional labour by occupations for the final research sample ( $N = 5,804$ ) based on information reported on the PDQ.

**Table 2. Participants Emotional Labour by Occupation**

Occupation	High Emotional Labour	Low Emotional Labour	Total
Business	2285	2181	4466
Education	309	Nil	309
Medical	292	Nil	292
Other	281	456	737
Total	3167	2637	5804

As depicted in Table 3 the Pearson's  $r$  correlation coefficients ranged from .32 to .73 for the ECR 10 subscales (excluding the validity subscale - Positive Impact). All correlations were significant at  $p < .001$ . Also shown in Table 3 are the ECR subscales reliability coefficients (Cronbach's alpha) for the total sample. All alphas were  $> .5$  suggesting that these measures demonstrated acceptable levels of reliability

**Table 3. Cronbach's Alphas and Intercorrelations of the Emotional Capital Report (ECR) Total Scale and Subscales**

Scale	F2	F3	F4	F5	F6	F7	F8	F9	F10
ECR Total (.94)									
F1: Self-Knowing (.78)	.44	.52	.56	.54	.57	.55	.61	.45	.43
F2: Self-Reliance (.69)		.58	.57	.54	.55	.32	.26	.31	.43
F3: Straightforwardness (.72)			.57	.50	.62	.36	.26	.34	.41
F4: Optimism (.79)				.68	.73	.50	.39	.54	.61
F5: Self-Actualization (.68)					.67	.47	.38	.44	.49
F6: Self-Confidence (.82)						.47	.34	.50	.48
F7: Relationship Skills (.75)							.65	.33	.44
F8: Empathy (.74)								.34	.35
F9: Self-Control (.75)									.41
F10: Adaptability (.59)									

$N = 5,804$ ; Cronbach's alphas in parentheses. All correlations are significant,  $p < .001$ . F1 to F10 number of items = 7; ECR Total number of items = 70 (does not include the Positive Impact subscale).

### Emotional Intelligence and Emotional Labour Analyses

Table 4 presents the means and standard deviations for participants who completed the ECR and the PDQ. Examination of the data (skewness and kurtosis) identified that the measures were approximately normally distributed and the subscales variances were approximately equivalent across the two levels of emotional labour thus adhering to the assumptions underlying an independent-samples  $t$  test. A series of  $t$  tests were conducted to compare the average ECR total and subscales scores between the two levels of emotional labour. Table 4 also presents the results of the  $t$  tests.

**Table 4 Emotional Capital Report (ECR) Total and Subscales Differences Between High Emotional Labour and Low Emotional Labour**

Scale	HEL		LEL		Cohen's			
	Mean	SD	Mean	SD	df	t	p	d
ECR Total	280.58	26.56	267.70	28.38	5463*	17.72	.000	0.47
F1: Self-Knowing	29.23	3.63	27.75	3.83	5802	15.12	.000	0.40
F2: Self-Reliance	29.13	3.40	28.00	3.55	5802	12.40	.000	0.29
F3: Straightforwardness	26.97	3.96	25.70	3.95	5802	12.23	.000	0.34

F4: Optimism	29.29	3.71	27.74	4.12	5358*	14.91	.000	0.48
F5: Self-Actualization	28.39	3.64	27.16	3.85	5491*	12.44	.000	0.32
F6: Self-Confidence	29.08	4.16	27.90	4.53	5419*	10.24	.000	0.34
F7: Relationship Skills	29.22	3.65	27.57	3.83	5802	16.76	.000	0.38
F8: Empathy	28.36	3.65	26.82	3.75	5802	15.75	.000	0.41
F9: Self-Control	25.30	4.17	24.56	4.25	5802	6.69	.000	0.20
F10: Adaptability	25.60	3.20	24.50	3.31	5802	12.89	.000	0.26

Note: HELN = 3,167; LEL = 2,637; Total N = 5,804; ECR Total range is 70-350, subscales range is 7-35.

\*Equal variances not assumed, Welch's *t* test was used.

**ECR emotional labour differences.** As shown in Table 4 the ECR Total and subscales mean scores were statistically higher for the high emotional labour participants than the low emotional labour participants ( $p < .001$ ). The effect sizes, Cohen's *d*, ranged from a small .20 (Self-Control) to a medium effect size of .48 (Optimism).

### High Emotional Labour Service Occupations Analyses

Table 5 presents the means and standard deviations according to high emotional labour service occupations ( $n = 3,167$ ). Examination of the data (skewness and kurtosis) identified that the measures were normally distributed and the subscales variances were equivalent across the three levels of high emotional labour service occupations thus adhering to the assumptions underlying a one-way ANOVA. A series of ANOVAs were conducted to determine if high emotional labour participants' ECR measures differed on the basis of the three types of service occupations (customer service, caring, social control). Table 5 presents the results of the ANOVAs with effect size estimates (eta-squared - <sup>2</sup>).

**Table 5. Means, Standard Deviations, and One-Way Analyses of Variance for the Effects of High Emotional Labour Service Occupations on the Emotional Capital Report (ECR) Total and Subscales scores**

Scale	CA		CO		CU		F	p	$\eta^2$
	Mean	SD	Mean	SD	Mean	SD			
ECR Total	273.61	29.91	273.97	23.48	283.10	25.11	40.15	.000	.024
F1: Self-Knowing	28.60	3.95	28.66	3.38	29.46	3.51	17.04	.000	.011
F2: Self-Reliance	28.16	.65	28.40	3.14	29.48	3.26	45.40	.000	.028
F3: Straightforwardness	25.58	4.22	26.21	3.37	27.45	3.79	66.55	.000	.040
F4: Optimism	28.28	4.21	28.29	3.36	29.66	3.48	44.35	.000	.027
F5: Self-Actualization	27.86	3.96	27.53	3.48	28.60	3.53	14.98	.000	.009
F6: Self-Confidence	27.90	4.75	28.19	3.79	29.49	3.90	44.51	.000	.027

F7: Relationship Skills	28.87	3.80	28.74	3.73	29.35	3.60	5.84	.003	.004
F8: Empathy	28.34	3.75	27.95	3.71	28.39	3.62	0.82	.441	.000
F9: Self-Control	24.91	4.25	25.49	4.15	25.41	4.14	4.15	.016	.003
F10: Adaptability	25.10	3.44	24.51	3.23	25.81	3.09	21.01	.000	.013

Note: CA= Caring ( $n = 728$ ), CO= Social Control ( $n = 118$ ), CU= Customer Service ( $n = 2,321$ );  $df = 2, 3164$

### High emotional labour service occupations ECR differences

As shown in Table 5 the main effect of high emotional labour service occupations on ECR scores was statistically significant for the ECR Total Scale and eight of the 10 subscales (Bonferroni adjustment of .0045 (.05/11 scales) was used to control for the inflated family-wise error rates that result from performing multiple tests on the same data. There were no statistical significant service occupations differences on the Empathy subscale nor the Self-Control subscale.

The effect size ( $d^2$ ) for each scale ranged from .003 (Self-Control subscale) to .040 (Straightforwardness subscale). According to Cohen's (1988) conventions, these are considered small effects.

### Post hoc high emotional labour service occupations multiple comparisons

Post hoc paired-samples  $t$  tests were conducted to identify the significant means differences of the high emotional labour service occupations using the LSD method for control of Type I error (Tabachnick & Fidell, 2007). The 99.55% confidence intervals for the pairwise differences, as well as the mean differences for service occupations are reported in Table 6.

**Table 6 Post Hoc 99.55% Confidence Intervals of Pairwise Significant ECR Scale Measures Differences in High Emotional Labour Service Occupations**

ECR Scale	Service Mean Occupation	99.55% Difference	99.55% Confidence Interval
ECR Total	CU > CA	9.49*	6.32 to 12.66
	CU > CO	9.13*	2.09 to 16.16
	CO > CA	0.36	-7.04 to 7.76
Self-Knowing	CU > CA	0.86*	0.42 to 1.29
	CU > CO	0.80	-0.17 to 1.77
	CO > CA	0.06	-0.96 to 1.08
Self-Reliance	CU > CA	1.31*	0.91 to 1.72
	CU > CO	1.08*	0.18 to 1.98
	CO > CA	0.24	-0.71 to 1.18
Straightforwardness	CU > CA	1.87*	1.40 to 2.33

	CU > CO	1.24*	0.20 to 2.28
	CO > CA	0.63	-0.46 to 1.72
Optimism	CU > CA	1.39*	0.94 to 1.83
	CU > CO	1.38*	0.39 to 2.36
	CO > CA	0.11	-1.02 to 1.04
Self-Actualization	CU > CA	0.74*	0.30 to 1.18
	CU > CO	1.07*	0.09 to 2.04
	CO < CA	-0.32	-1.35 to 0.70
Self-Confidence	CU > CA	1.59*	1.10 to 2.09
	CU > CO	1.30*	0.20 to 2.40
	CO > CA	0.30	-0.86 to 1.45
Relationship Skills	CU > CA	0.48*	0.04 to 0.92
	CU > CO	0.62	-0.36 to 1.59
	CO < CA	-0.14	-1.17 to 0.89
Empathy	CU > CA	0.50	-0.39 to 0.49
	CU > CO	0.44	-0.54 to 1.42
	CO < CA	-0.39	-1.42 to 0.64
Self-Control	CU > CA	0.52	0.00 to 1.01
	CU < CO	-0.08	-1.20 to 1.04
	CO > CA	0.58	-0.60 to 1.76
Adaptability	CU > CA	0.71*	0.32 to 1.09
	CU > CO	1.30*	0.45 to 2.16
	CO < CA	-0.60	-1.49 to 0.30

CA= Caring, CO= Social Control, CU= Customer Service

\* The mean difference is significant at the .0045 level.

## Discussion

The current study sought to clarify the relationship of emotional intelligence to jobs requiring emotional labour. A number of studies have suggested that individuals who perform jobs that require the expression of emotional labour were likely to require higher levels of emotional intelligence (O'Boyle et al., 2011; Joseph & Newman, 2010; Brotheridge, 2006). In particular, the current study examined the relationship of a model of mixed EI to emotional labour identified in recent literature as performed by workers in three types of service occupations, customer service, social control and caring. By differentiating between types of emotional labour we partially extended the work of Joseph and Newman (2010) who provided initial evidence for the relationship of EI and emotional labour. They reported that emotional labour was an important moderator of the EI-performance relationship, i.e., that EI was a better predictor of performance for occupations that primarily involved emotional labour. Although the current study did not examine the EI-performance relationship where performance ratings were provided by an external source, nevertheless enough information was provided to calculate a correlation between EI and job



performance identified by the type of emotional labour performed. Moreover, previous research used relatively small sample sizes to examine this relationship. The current study sought to overcome this limitation by using much larger sample sizes.

The results of our study supported the existence of a moderate relationship between a mixed model of EI and emotional labour. The main effect of emotional labour on all ECR scores was statistically higher for the high emotional labour group. Accordingly, the findings suggest that where jobs require high emotional labour, EI is likely to help individuals to know both when to perform emotional labour and how to alter emotional behavior to meet organizational goals. As such, the results confirm earlier findings that emotional labour appears to serve as a moderator of the relationship between emotional intelligence and performance (Grandey, 2000; Wong & Law, 2002). This finding has potential implications for organizations seeing to maximize the effectiveness of their staff. Given that high EI is likely to provide the foundation for the successful execution of roles involving emotional labour, organizations that invest in the development of EI in their employees are likely to assist these individuals to be more successful in their roles.

Furthermore, when service occupations were examined for the type of emotional labour performed, those in customer service occupations produced significantly higher scores on the ECR Total Scale and eight of the 10 ECR scales scores with the exception of Empathy and Self-Control. We note, however, that the number of participants in the customer service group was much larger than either the caring or social control groups and made up over 70 percent of the total high emotional labour group. Nevertheless, our findings are consistent with Hochschild's (1983) initial emphasis on emotional labour as performed toward the customer that requires workers to have face-to-face or voice-to-voice contact with the public.

Customer service workers are required to alter their emotional display specifically to meet organizational goals by producing an emotional state in the customer. The ability to alter one's emotional display depends first of all on being able to recognize one's emotional experience. Competencies such as self-knowing, self-reliance, self-actualization, and self-confidence may assist in this regard. The ability then to regulate one's own emotional display appears dependent on the capacity to adapt one's thinking, feelings and actions in response to changing circumstances and be receptive to new ideas and tolerant of others - a competency defined by Newman and Purse (2007) as adaptability. Similarly, the demand to produce a positive emotional state in a customer may require competencies such as relationship skills - the competence

to collaborate with others and create positive expectations, along with optimism – the competence to focus on positive outcomes, and straightforwardness – the competence to communicate clearly. According to Humphrey et al. (2008) customer service jobs generally require the expression of friendly, positive emotions that most people like expressing and experiencing. Taken together, it is perhaps not surprising that occupations in which there is frequent customer interaction require higher levels of particular competencies associated with emotional intelligence.

These findings have implications for organisations selecting individuals for roles involving customer service. Although the effect sizes were generally small, nevertheless it is likely that individuals who possess higher EI are likely to perform customer-facing roles more effectively than those with lower EI competencies. As such, organisations should consider both identifying individuals with high emotional intelligence or supporting the training and development of these competencies in individuals who perform these roles.

We noted that no significant differences for type of service occupation were found for either the Empathy or Self-Control subscales. It appears that empathy and self-control are core emotional competencies in all types of service occupations. This is particularly evident in caring service occupations such as nursing and social work. In these roles, job demands require nurses and social workers to display understanding in relation to the particular physical and emotional needs of their clients. However, these roles also require that individuals demonstrate concerns that are associated with sad and stressful life events. As such, they must modify their display of emotion to appropriate professional levels. Self-control is associated not only with modifying the display of emotion, but also managing the internal effects of stress that negative life events can create.

In a similar vein, social control service occupations such as law enforcement require individuals to display a degree of emotional self-control while communicating in a straightforward and assertive manner. According to Newman and Purse (2007), straightforwardness involves remaining patient and managing one's emotions while restraining action and remaining calm in stressful situations without losing control. Furthermore, straightforwardness can also be made more effective when combined with empathy that shows understanding of the other person's position.

Finally, empathy and straightforwardness are also core emotional competencies in customer service roles where clear communication and

the ability to create resonant emotional connections with customers are important in the successful execution of these roles. According to Humphrey et al. (2008), sometimes the hectic work pace and stressful working conditions in customer service situations may sometimes require employees to fake their emotional expressions, a position similar to Hochschild's (1983) notion of surface acting. We note that Humphrey et al. also recognized that in order to display the appropriate emotions, employees might also have to regulate their internal emotional states. This position appears closer to ESC theory that prefers to understand the capacity to modify emotional expression in response to external demands in terms of a genuine competency rather than surface acting.

### **Limitations and Future Directions**

Although the study involved a large sample size, once participants were separated into service occupation groups, numbers in both the caring and social control service groups were much smaller than numbers in the customer service group. This is particularly true for the social control group that represented less than 5 percent of the total high emotional labour group. Further research should address this limitation and strive for proportional representation in each group.

Second, given that the sample was recruited from eleven countries or geographical regions future research might also examine the extent to which international differences and cultural influences affect both scores on EI and the demands of social labour as defined by various cultural expectations. Although jobs involving emotional labour may involve at least some of the competencies associated with EI, the relative expression of these competencies may vary by the nature of cultural expectations involved.

Third, in addition to concerns regarding the questionable incremental validity of EI to predict job performance in roles that require emotional labour, concerns also exist regarding sex differences in emotion. Future research should examine both the gender effects on EI on and roles involving emotional labour. Newman and Purse (2007) reported that gender analyses revealed only minor differences between males and females on ECR scales. Although this finding is consistent with previous research using stream 3 measures, Joseph and Newman (2010) commented that '... very little empirical work has reported on sex differences in EI dimensions.' (p.71). More work in this regard remains to be done.

Fourth, although previous research by O'Boyle et al., (2011) and Joseph and Newman (2010) focused on the relative importance of EI, cognitive intelligence and personality variables on job performance, in-

cluding emotional labour, this study focused specifically on the importance of EI to different jobs requiring emotional labour. Future research might examine the extent to which the job being performed is influenced by the relative importance of EI, cognitive intelligence, and personality variables.

Fifth, some have argued that leaders also perform emotional labour particularly whenever they display emotions in an attempt to influence their subordinates' moods and motivations (Humphrey et al., 2008). We noted that our sample consisted of leaders participating on various leadership development program initiated by their organizations. Little detailed information was provided to determine participants' level of leadership responsibilities or whether their leadership roles primarily involved people management or functional roles. Newman and Purse, (2007) provided initial evidence that leaders in senior management roles scored significantly higher on the ECR Total Score. Given that most leadership roles involve emotional labour, it is likely that leaders with high levels of emotional intelligence are more effective in these roles. This should of interest to researchers in organizational settings and should be investigated further along with the potential ways that educational and training programs can improve people's EI-related competencies.

Finally, we classified emotional labour by coding jobs according to four items about emotional labour identified by Joseph and Newman (2010) and adapted from Grandey (2000) and Hochschild's, (1983) criteria for emotional labour jobs. We then further classified the high emotional labour groups according to the type of service occupation represented. Within this conceptualisation emotional labour demands and display rules were viewed as a characteristic of particular occupations. We noted that the effect sizes for ECR scales and the various service occupations were quite small. It may be that recent changes in the nature of work and changing role definitions have blurred the distinctions between service occupations. For example, organizations today refer to customer care, and those in the caring professions, such as social workers, are often called upon to work in potentially threatening and challenging environments requiring some form of social control. Similarly, those in law enforcement are frequently required to demonstrate care for victims of crime. Accordingly, in future research display rules may need to be conceptualized not only as role requirements of particular occupational groups, but also as interpersonal job demands, which are shared by many kinds of occupations (Diefendorff & Richard, 2003).

## Conclusion

Although EI as a construct remains controversial, a number of researchers have argued that EI is an important predictor of work-related outcomes (Ashkanasy & Daus, 2005; Brackett et al., 2004; Dulewicz & Higgs, 2000; Law et al., 2004). There appears to be considerable support for this claim, particularly when EI is conceived in terms of emotional and social competencies (ESC) rather than an ability-based model (Cherniss, 2010; Joseph & Newman, 2010; O'Boyle et al., 2011; Offermann et al., 2004). The results of this study lend further support to this claim.

The EI-performance link, however, does not necessarily predict performance across all jobs. It appears to be stronger in some situations than in others and. EI showed great promise of being generalised as a predictor of performance for occupations that primarily involved emotional labour. Furthermore, certain work settings involving emotional labour will undoubtedly encourage the display of different emotionally intelligence competences. Those in customer service occupations produced significantly higher scores on the majority of emotional intelligence competencies than those in caring and social control occupations. Taken together, these findings lend support to Cherniss' (2010) recommendation that when considering the EI-performance link we need to study the emotionally intelligent context as well as emotionally intelligent people. These conclusions have important practical implications not only for researchers, but also for human resource personnel seeking to improve the job related performance of employees. Where employees are required to perform emotional labour by expressing socially desired emotions or regulating internal emotional states as part of their job role, competencies associated with EI are likely to be very useful. Accordingly, organisations which encourage the development of EI in certain work settings are likely to assist individuals to be more effective in their roles as well as making the workplace more productive.

## References

- Antonakis, J., Ashkanasy, N. M. & Dasborough, M. (2009). Does leadership need emotional intelligence? *The Leadership Quarterly*. 20(2), 247-261. <http://dx.doi.org/10.1016/j.leaqua.2009.01.006>
- Ashforth, B. E. & Humphrey, R. H. (1993). Emotional labour in service roles: The influence of identity. *Academy of Management Review*. 18(1), 88-115.
- Ashkanasy, N. M. & Daus, C. S. (2005). Rumors of the death of emotional intelligence in organizational behavior are vastly exaggerated. *Journal of Organizational Behavior*. 26(4), 441-452. <http://dx.doi.org/10.1002/job.320>
- Ashkanasy, N. M., Härtel, C. E. J. & Daus, C. S. (2002). Diversity and emotion: The new frontiers in organizational behavior research. *Journal of Management*. 28(3), 307-338. <http://dx.doi.org/10.1177/014920630202800304>
- Bachman, J., Stein, S., Campbell, K. & Sitarenios, G. (2000). Emotional

- intelligence in the collection of debt. *International Journal of Selection and Assessment*. 8(3), 176-182. <http://dx.doi.org/10.1111/1468-2389.00145>
- Bar-On, R. (1988). *The development of a concept of psychological well-being*. (Unpublished doctoral dissertation) Rhodes University, Johannesburg, South Africa.
- Bar-On, R. (1997). *The Emotional Intelligence Inventory (EQ-i): Technical manual*. Toronto: Multi-Health Systems.
- Boyatis, R. E., Goleman, D. & Hay/McBer. (2008). *Emotional Competence Inventory*. Boston, MA: Hay Group.
- Boyatzis, R. E., Goleman, D. & Rhee, K. (2000). Clustering competence in emotional intelligence: Insights from the Emotional Competence Inventory (ECI)s. In R. Bar-On and J.D.A. Parker (Eds.), *Handbook of emotional intelligence* (pp. 343-362). San Francisco, CA: Jossey-Bass.
- Brackett, M. A., Mayer, J. D. & Warner, R. M. (2004). Emotional intelligence and its relation to everyday behavior. *Personality and Individual Differences*. 36(6), 1387-1402. [http://dx.doi.org/10.1016/S0191-8869\(03\)00236-8](http://dx.doi.org/10.1016/S0191-8869(03)00236-8)
- Brotheridge, C. M. (2006). The role of emotional intelligence and other individual differences in predicting emotional labour relative to situational demands. *Psicothema*. 18, 139-144.
- Cherniss, C. (2010). Emotional intelligence: Toward clarification of a concept. *Industrial and Organizational Psychology: Perspectives on Science and Practice*. 3(2), 110-126. <http://dx.doi.org/10.1111/j.1754-9434.2010.01231.x>
- Chia, Y. M. (2005). Job offers of multi-national accounting firms: The effects of emotional intelligence, extra-curricular activities, and academic performance. *Accounting Education: An International Journal*. 14(1), 75-93. <http://dx.doi.org/10.1080/0693928042000229707>
- Cohen, J. (1988). *Statistical power analysis for the behavioural sciences* (2<sup>nd</sup> ed.). Hillsdale, NJ: Lawrence Erlbaum.
- Diefendorff, J. M. & Richard, E. M. (2003). Antecedents and consequences of emotional display rule perceptions. *The Journal of Applied Psychology*. 88(2), 284-294. <http://dx.doi.org/10.1037/0021-9010.88.2.284>
- Diefendorff, J. M., Croyle, M. H. & Gosserand, R. H. (2005). The dimensionality and antecedents of emotional labour strategies. *Journal of Vocational Behavior*. 66(2), 339-357. <http://dx.doi.org/10.1016/j.jvb.2004.02.001>
- Dulewicz, V. & Higgs, M. (2000). Emotional intelligence: a review and evaluation study. *Journal of Managerial Psychology*. 15(4), 341-372. <http://dx.doi.org/10.1108/02683940010330993>
- Goleman, D. (1998). *Working with emotional intelligence*. New York, NY: Bantam books.
- Gooty, J., Connelly, S., Griffith, J. & Gupta, A. (2010). Leadership, affect and emotions: A state of the science review. *The Leadership Quarterly*. 21(6), 979-1004. <http://dx.doi.org/10.1016/j.leaqua.2010.10.005>
- Grandey, A. A. (2000). Emotional regulation in the workplace: A new way to conceptualize emotional labour. *Journal of Occupational Health Psychology*. 5(1), 95-110. <http://dx.doi.org/10.1037/1076-8998.5.1.95>
- Grandey, A., Diefendorff, J. & Rupp, D. (2013). *Emotional labour in the 21<sup>st</sup> century: Diverse perspectives on emotion regulation at work*. New York, NY: Routledge.
- Henderson, A. (2001). Emotional labour and nursing: An under-appreciated aspect of caring work. *Nursing Inquiry*. 8(2), 130-138.



- <http://dx.doi.org/10.1046/j.1440-1800.2001.00097.x>
- Hochschild, A. R. (1983). *The managed heart: Commercialization of human feeling*. Berkeley, CA: University of California Press.
- Humphrey, R. H., Pollack, J. M. & Hawver, T. (2008). Leading with emotional labour. *Journal of Managerial Psychology*. 23(2), 151-168.  
<http://dx.doi.org/10.1108/02683940810850790>
- IBM. (2011). IBM SPSS Statistics for Windows (Version 20.0) [Software]. Armonk, NY: IBM Corp.
- Jordan, P. J., Ashkanasy, N. M., Härtel, C. E. J. & Hooper, G. S. (2002). Workgroup emotional intelligence: Scale development and relationship to team process effectiveness and goal focus. *Human Resource Management Review*. 12(2), 195-214. [http://dx.doi.org/10.1016/S1053-4822\(02\)00046-3](http://dx.doi.org/10.1016/S1053-4822(02)00046-3)
- Joseph, D. L. & Newman, D. A. (2010). Emotional intelligence: An integrative meta-analysis and cascading model. *The Journal of Applied Psychology*. 95(1), 54-78. <http://dx.doi.org/10.1037/a0017286>
- Landy, F. J. (2005). Some historical and scientific issues related to research on emotional intelligence. *Journal of Organizational Behavior*. 26(4), 411-424. <http://dx.doi.org/10.1002/job.317>
- Larson, E.B. & Xin Yao. (2005). Clinical empathy as emotional labour in the patient-physician relationship. *Journal of the American Medical Association*. 293(9), 1100-1106. <http://dx.doi.org/10.1001/jama.293.9.1100>
- Law, K. S., Wong, C. S. & Song, L. J. (2004). The construct and criterion validity of emotional intelligence and its potential utility for management studies. *The Journal of Applied Psychology*. 89(3), 483-496.  
<http://dx.doi.org/10.1037/0021-9010.89.3.483>
- Little, R. & Rubin, D. (2002). *Statistical analysis with missing data* (2<sup>nd</sup> ed.). New York, NY: Wiley.
- Locke, E. A. (2005). Why emotional intelligence is an invalid concept. *Journal of Organizational Behavior*. 26(4), 425-431. <http://dx.doi.org/10.1002/job.318>
- Lopez, S. H. (2006). Emotional labor and organized emotional care conceptualizing nursing home care work. *Work and Occupations*. 33(2), 133-160.
- Martins, A., Ramalho, N. & Morin, E. (2010). A comprehensive meta-analysis of the relationship between Emotional Intelligence and health. *Personality and Individual Differences*. 49(6), 554-564.  
<http://dx.doi.org/10.1016/j.paid.2010.05.029>
- Mayer, J. D., Roberts, R. D. & Barsade, S. G. (2008). Human abilities: Emotional intelligence. *Annual Review of Psychology*. 59, 507-536.  
<http://dx.doi.org/10.1146/annurev.psych.59.103006.093646>
- Mayer, J. D. & Salovey, P. (1997). What is emotional intelligence? In P. Salovey & D. Sluyter (Eds.), *Emotional development and emotional intelligence: Implications for educators* (pp. 3-31). New York, NY: Basic Books.
- Mayer, J. D., Salovey, P. & Caruso, D. R. (2002). *Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT) User's Manual*. Toronto: Multi-Health Systems.
- Newman, M. & Purse, J. (2007). *Emotional Capital Report – Technical manual*. Melbourne, Australia: RocheMartin Institute.
- O'Boyle, E., Humphrey, R., Pollack, J., Hawver, T. & Story, P. (2011). The relation between emotional intelligence and job performance: A meta-analysis. *Journal of Organizational Behavior*. 32(5), 788-818.

- <http://dx.doi.org/10.1002/job.714>
- Offermann, L. R., Bailey, J. R., Vasilopoulos, N. L., Seal, C. & Sass, M. (2004). The relative contribution of emotional competence and cognitive ability to individual and team performance. *Human Performance*. 17(2), 219-243. [http://dx.doi.org/10.1207/s15327043hup1702\\_5](http://dx.doi.org/10.1207/s15327043hup1702_5)
- Petrides, K. V. & Furnham, A. (2003). Trait emotional intelligence: Behavioural validation in two studies of emotion recognition and reactivity to mood induction. *European Journal of Personality*. 17(1), 39-57. <http://dx.doi.org/10.1002/per.466>
- Petrides, K. V. & Furnham, A. (2006). The role of trait emotional intelligence in a gender-specific model of organizational variables. *Journal of Applied Social Psychology*. 36(2), 552-569. <http://dx.doi.org/10.1111/j.0021-9029.2006.00019.x>
- Petrides, K. V., Pita, R. & Kokkinaki, F. (2007). The location of trait emotional intelligence in personality factor space. *The British Journal of Psychology*. 98(2), 273-289. <http://dx.doi.org/10.1348/000712606X120618>
- Psilopanagioti, A., Anagnostopoulos, F., Mourtou, E. & Niakas, D. (2012). Emotional intelligence, emotional labour, and job satisfaction among physicians in Greece. *BMC Health Services Research*. 12, 463. <http://dx.doi.org/10.1186/1472-6963-12-463>
- Pugh, S. D. (2001). Service with a smile: Emotional contagion in the service encounter. *Academy of Management Journal*. 44(5), 1018-1027. <http://dx.doi.org/10.2307/3069445>
- Rafaeli, A. & Sutton, R. I. (1990). Busy stores and demanding customers: How do they affect the display of positive emotion? *Academy of Management Journal*. 33(3), 623-637. <http://dx.doi.org/10.2307/256584>
- Schutte, N. S. et al. (1998). Development and validation of a measure of emotional intelligence. *Personality and Individual Differences*. 25(2), 167-177. [http://dx.doi.org/10.1016/S0191-8869\(98\)00001-4](http://dx.doi.org/10.1016/S0191-8869(98)00001-4)
- Tabachnick, B. & Fidell, L. (2007). *Using multivariate statistics* (5<sup>th</sup> ed.). Boston, MA: Allyn and Bacon.
- Van Dijk, P. A. & Kirk-Brown, A. (2006). Emotional labour and negative job outcomes: An evaluation of the mediating role of emotional dissonance. *Journal of Management & Organization*. 12, 101-115. <http://dx.doi.org/10.5172/jmo.2006.12.2.101>
- Van Rooy, D. L., Viswesvaran, C. & Pluta, P. (2005). An evaluation of construct validity: What is this thing called emotional intelligence? *Human Performance*. 18(4), 445-462. [http://dx.doi.org/10.1207/s15327043hup1804\\_9](http://dx.doi.org/10.1207/s15327043hup1804_9)
- Wong, C. & Law, D. S. (2002). The effects of leader and follower emotional intelligence on performance and attitude: An exploratory study. *The Leadership Quarterly*. 13(3), 243-274. [http://dx.doi.org/10.1016/S1048-9843\(02\)00099-1](http://dx.doi.org/10.1016/S1048-9843(02)00099-1)