# "Personality type: optimizing the development of emotional intelligence"

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# Personality type: optimizing the development of emotional intelligence

## Abstract

The development of managers' emotional intelligence (EI) has been advocated as fundamental to their success as leaders. Despite the Meyers Briggs Type Indicator (MBTI) being one of the most widely applied psychological measures of personality type in leadership development, there is inconclusive evidence on the relationship between personality type and EI. This study examined the relationship between personality preference types and emotional intelligence (EI) in a sample of 1 121 employees in a South African investment bank. Instruments for data collection included the Myers-Briggs Type Indicator (MBTI) and the Bar-On Emotional Intelligence Quotient (Bar-On EQ-i). Data were analyzed utilizing one-way analysis of variance (ANOVA) to determine the effects of personality preference types on EI. Findings suggest a significant, positive relationship between overall EI and the personality preferences of extroversion, thinking and judging. The feeling preference affected interpersonal EI positively. Intuitive-thinking personality types showed significantly higher intrapersonal and mood EI subcomponent scores and sensing-feeling personality types demonstrated significantly lower EI subcomponent scores for intrapersonal and stress tolerance. Findings suggest that areas for EI development can be inferred from MBTI personality type preferences. Aligning coaching and development with personality preferences present valuable EI development alternatives.

**Keywords:** personality preferences, personality type, emotional intelligence, Bar-On EQ-i, Myers-Briggs type indicator (MBTI), mixed model of emotional intelligence.
**JEL Classification:** O15, M53, M12.

## Introduction

Emotional intelligence (EI) and personality are regarded as significant predictors of key individual and organizational outcomes (Bar-On, 2004; Bar-On, Handley & Fund, 2006; Jorfi, Jorfi & Moghadam, 2010; Yousuf & Ahmad, 2007). Job satisfaction and performance has been positively related to EI (Bar-On, 2010; Jorfi et al., 2010; Sahdat, Sajjad, Farooq & Rehman, 2011) as well as to personality (Allameh, Ghafari & Davoodi, 2012; Askarian & Eslami, 2013; Rothman & Coetzer, 2003). Employees' psychological wellbeing has also been related to certain aspects of both EI and personality (Bar-On, 2010; Landa, Martos & Lopez-Zafra, 2010; James, Bore & Zito, 2012; Schutte, Malouff & Thorsteinsson, 2013). Leadership studies furthermore highlight the central role of EI in effective leadership (Asadullah, 2013; George, 2000; Siegling, Nielsen, & Petrides, 2014), and confirm EI as fundamental to developing leadership and managerial capability (Batool, 2013; Chopra & Kanji, 2010; Mittal & Sindhu, 2012; Yousuf & Ahmad, 2007). Similar to the popularity of EI, personality type as measured by the MBTI has been a popular personality theory frequently applied in leadership and employee development (Leary, Reilly & Brown, 2009).

Consequent to observing the impact of EI or personality type on aspects such as job performance, wellbeing and leadership development, there has been growing interest in examining the relationship between personality type and EI (Thompson, 2006). Research exploring the impact of personality type preferences on EI is however limited (Leary et al., 2009) and reports inconsistent findings, with the exception of supporting a relatively strong relationship between EI and Extraversion (Thompson, 2006; Farnsworth, Gilbert & Armstrong, 2002; Leary et al., 2009; Engstrom, Boozer, Maddox & Forte, 2010; Higgs, 2001; Torrington, 2001; Sjoberg, Littorin & Engelberg, 2005). Engstrom (2005) for example found a partial relationship between psychological type and EI, yet Perry and Ball (2005) and Sjoberg (2001) reported no significant findings between EI and any of the psychological type preferences. Such inconsistent research results may be ascribed to small, job specific samples, variations in EI conceptualization and measurement and a predominant use of correlational analysis. More research, with larger and more representative samples in different contexts, is called for to build on the current body of knowledge about the relationship between EI and personality type. Identifying personality types associated with EI may impact on employee development interventions and contribute to alternative employee development strategies (Schutte et al., 2013). The purpose of this study was to investigate the relationship between personality preferences and EI by specifically exploring the effects of personality type preferences on EI.

## 1. Literature review

**1.1. Personality type preferences.** Jung's (1921) theory of psychological types classifies individuals

in terms of opposing attitudes (extraversion and introversion), perceiving functions (sensation and intuition) and judging functions (thinking and feeling). Katherine Briggs and Isabel Briggs Myers extended Jung's concept of psychological type by developing a personality typology since known as the MBTI (Brown & Reilly, 2009; Knott, Taylor, Oosthuizen & Bhabha, 2013) adding a fourth dimension judgement-perception. The MBTI typology consists of four personality preferences on four dichotomous scales (Myers, McCaulley, Quenk & Hammer, 1998):

♦ *Orientation of energy* – Extraversion refers to a preference for focussing one's attention and energy on the external world of people or events *versus* Introversion focussing on the inner world of ideas and reflection.

♦ *Preferred processes of perception* – Sensing refers to the preference for acquiring information by being observant and using the five senses *as opposed to* Intuition preferring acquiring information based on patterns, "big picture" perception and an emphasis on possibilities.

♦ *Preferred processes of decision-making* – Thinking refers to a preference for making decisions based on logical consequences, using objective, analytical problem-solving methods *versus* Feeling preferring decisions based on person-centred values.

♦ *Orientation for dealing with the outer world* – Judging refers to a preference for dealing with the outer world in a planned and systematic way *opposed to* Perceiving preferring a flexible, spontaneous and adaptable approach.

Whilst there is wide agreement that the MBTI should not be used for selection (Knott et al., 2013), the MBTI contributes to forming effective teams (Gorla & Lam, 2004; Shen, Prior, White & Karamanoglu, 2007) and is mostly used for leadership, career, team and relationship development (see Hammer, 1997; Barrick & Mount, 2005; Fakir, 2013).

**1.2. Emotional intelligence.** Conceptualizations of EI are categorized in trait or ability based models (Palmer, Gardner & Stough, 2003; Schutte et al., 2013). Vaida and Opre (2014) however identify three mainstream perspectives having evolved through EI research. First, the emotional capability model of Mayer and Salovey (1997) defining EI as the ability to perceive, understand, manage and use emotions to facilitate thinking. Second, Goleman's (1998) model of emotional competence defines EI as a range of competencies and skills that drive

managerial performance. Third, the Bar-On emotional quotient model is a mixed model (Vaida & Opre, 2014) defining EI as consisting of an array of interrelated emotional and social competencies, personality traits and skills, used in coping with daily demands and pressures (Bar-On, 1997). Self-report measures of EI are divided into ability based measures and personality based measures such as the Bar-On EQ-i (Palmer et al., 2003). Despite arguments posed by Locke (2005) countervailing the construct validity of EI, applications of EI in leadership development abound (Asadullah, 2013; Chopra & Kanji, 2010; Mittal & Sindhu, 2012; Yousuf & Ahmad, 2007) with the Bar-On EQ-i, a widely used measure of EI and research supporting its internal consistency and construct validity (Dawda & Hart, 2000) and predictive validity in terms of leadership success (Barling, Slater & Kelloway, 2000; Mandell & Pherwani, 2003).

Bar-On's (1997, 2000) model of EI includes five key components and 15 sub components of effective emotional and social functioning. Firstly, "intrapersonal" refers to emotional self-awareness, self-regard, assertiveness and the ability to express one's feelings and be self-directed. Secondly, "interpersonal" is described as the ability to be aware of, understand and appreciate others' feelings and the ability to establish and maintain mutually satisfying relationships with other people. Thirdly, "stress management" refers to the ability to actively and positively cope with stressful situations and the ability to act and control one's emotions. Fourthly, "adaptability" refers to the ability to remain flexible in changing situations and conditions and to identify and solve personal and social problems. Lastly, "general mood" is the ability to maintain a positive attitude towards life, to feel satisfied with one's life, and to express positive emotions (Bar-On, 2000). The EI components are described by Bar-On (1997) as non-cognitive, personality related attributes which can change and be developed through relevant training (Palmer et al., 2003).

## 2. Research method

**2.1. Participants and setting.** The study used secondary assessment data of a South African investment bank. A convenience sample (n = 1121) of employees included a 40% of female, 60% of male distribution and 86% of the sample in the age range 21-40 years ($\bar{x}$ = 33). In terms of race, white and black employees constituted 44% and 41% of the sample, with 13% of Indian and 2% of coloured employees. The sample included 328 general, non-managerial staff (40%), 98 junior managers (12%), 277 middle managers (35%), 77 senior managers (10%) and 25 executives (3%).

**2.2. Measures.** *2.2.1. Personality type measure.* The MBTI, Form G (Myers, 1980), is a self-report personality measure in forced-choice format, classifying individuals into psychological types. The main objective of the MBTI is to assess individual preferences for each of the opposite poles on the four dichotomies described above, indicating a preferred personality type. Individuals are thus characterized as either extraverted (E) or introverted (I), sensing (S) or intuitive (N), thinking (T) or feeling (F), and judging (J) or perceiving (P), thus creating a four-letter combination of 16 possible personality type profiles (e.g. ESTJ/INFP/ENTJ) (Myers et al., 1998). The MBTI is one of the most widely used personality measures globally (Brown & Reilly, 2009; Furnham & Crump, 2014; Leary et al., 2008; Quenk, 2000) with internal consistencies scores ranging from 0.7 to 0.97 (Baptista, 2009; Capraro & Capraro, 2002; Carskadon, 1979; Myers & McCaulley, 1998; Murray, 1990) and good construct validity (Bartram & Brown, 2005a; Bayne, 1997; Hammer, 1996; Myers et al., 1998; Thompson & Borrello, 1986; Quenk, 2000; Tischler, 1994; Van Zyl & Taylor, 2012).

*2.2.2. Emotional intelligence.* The Bar-On EQ-i (Bar-On, 1997) is a self-report EI measure consisting of 133 items with a five-point Likert scale producing a total EI score, five composite scale scores and 15 subscale scores. The five composite scales are: intrapersonal (consisting of subscales self-regard, emotional self-awareness, assertiveness, independence and self-actualization); interpersonal (subscales: empathy, social responsibility and interpersonal relationships); adaptability (subscales: reality-testing, flexibility and problem-solving); stress management (subscales: stress tolerance and impulse control); and general mood scales (subscales: optimism and happiness) (Bar-On, 2006). For internal consistency Bar-On (2006) reported reliability coefficients ranging from 0.69-0.86, with an overall average internal consistency of 0.76. Alpha coefficients were also high for all of the composite scales, and ranged from 0.82-0.92.

**2.3. Analytic procedure and ethical considerations.** Statistical analysis was carried out using SAS (version 9.2). ANOVA was used to explore the effect of mean MBTI (independent variable) scale scores on mean EI (dependent variable) scores, and Bonferroni multiple comparison of means test was used to control for inflation of Type 1 error with multiple comparisons. Permission to conduct the research and access the available employee assessment data was obtained from the research organization. Written consent to use assessment results for research purposes is obtained as standard practice in all the bank's assessments. All assessments were conducted by qualified assessment professionals, accredited by the Health Professions Council of South Africa.

# 3. Results

Table 1 shows mean scores for the six EI subcomponents indicating that sample participants display average total EI ($\bar{x}$ = 104.01; SD = 8.58), with stress tolerance ($\bar{x}$ = 105.58; SD = 10.92) and adaptability ($\bar{x}$ = 105.64; SD = 10.7) being the highest and interpersonal the lowest ($\bar{x}$ = 102.56; SD = 11.16).

Table 1. Sample means scores on Bar-On EQ-i subscales

| Variable | Label | N | Mean | Std. dev. | Minimum | Maximum |
|---|---|---|---|---|---|---|
| EQTot | EQTot | 1121 | 104.01 | 8.58 | 69.00 | 125.00 |
| EQIntra | EQIntra | 1121 | 103.96 | 9.78 | 63.00 | 126.00 |
| EQInter | EQInter | 1121 | 102.56 | 11.16 | 55.00 | 127.00 |
| EQStress | EQStress | 1121 | 105.58 | 10.92 | 63.00 | 132.00 |
| EQAdapt | EQAdapt | 1121 | 105.64 | 10.70 | 76.00 | 131.00 |
| EQMood | EQMood | 1121 | 103.31 | 10.11 | 60.00 | 125.00 |

Table 2 shows Spearman's correlation coefficients and associated significance for MBTI temperament combinations on the six EQ-i subcomponents. The strongest significant correlation is shown between EQTotal and the I-E preference grouping as a moderately strong negative correlation ($r$ = -0.4; p < 0.0001). The I-E preference group also shows moderately strong relationships with all the other EQ-i subcomponents on the 1% level of significance, ranging from EQIntra ($r$ = -0.38), EQMood ($r$ = -0.37), EQInter ($r$ = -0.35), EQAdapt ($r$ = -0.27) and EQStress ($r$ = -0.17). The J-P preference group also correlates significantly with EQTotal ($r$ = 0.18) (slight positive relationship), and with EQStress ($r$ = 0.24) and EQAdaptability ($r$ = 0.24), showing moderately strong positive relationships with the latter two EQ-i components. The I-E and J-P preference grouping demonstrate significant positive and moderate relationships with EQTotal ($r$ = 0.23), EQIntra ($r$ = 0.24), EQInter ($r$ = 0.22) and the strongest correlation with EQMood ($r$ = -0.28).

Table 2. Correlations between MBTI and EQ-i

| | EQTot | EQIntra | EQInter | EQStres | EQAdapt | EQMood |
|---|---|---|---|---|---|---|
| | Spearman correlation coefficients Prob > |r| under H0: Rho = 0 Number of observations | | | | | |
| IE | -0.38902* | -0.37988* | -0.35126* | -0.17135* | -0.27279* | -0.37427* |
| | <.0001 | <.0001 | <.0001 | <.0001 | <.0001 | <.0001 |
| | 1121 | 1121 | 1121 | 1121 | 1121 | 1121 |
| JP | 0.18055* | 0.12916 | 0.10585 | 0.24197* | 0.24128* | 0.03662 |
| | <.0001 | <.0001 | 0.0004 | <.0001 | <.0001 | 0.2205 |
| | 1121 | 1121 | 1121 | 1121 | 1121 | 1121 |
| NS/TF | -0.01381 | -0.02447 | -0.03184 | 0.04562 | 0.02534 | -0.02141 |
| | 0.6441 | 0.4131 | 0.2867 | 0.1269 | 0.3967 | 0.4739 |
| | 1121 | 1121 | 1121 | 1121 | 1121 | 1121 |
| E/I and J/ | 0.22604* | 0.24237* | 0.21979* | 0.05119 | 0.10210 | 0.27600* |
| | <.0001 | <.0001 | <.0001 | 0.0867 | 0.0006 | <.0001 |
| | 1121 | 1121 | 1121 | 1121 | 1121 | 1121 |

Note: *Statistically significant at $p < 0.0001$ level.

Table 3 reflects the ANOVA and the Bonferroni test on score means for each EQ-i component to investigate the significance of the MBTI preference groupings on an aspect of EI.

**3.1. I-E personality type preference influences on EI.** ANOVA results show that the I-E personality preference influences means scores across most EQ-i components, with the extreme E-type (E++) associated with significantly ($p < 0.0001$) higher EI total and component scores, gradually declining to the extreme I-type (I++) with significantly lower EQ-i component scores. A strong Extroversion preference consistently indicates a significantly higher EQ-i component means score compared with even a slight Extroversion or Introversion preferences, as well as with moderate and strong Introversion preferences on EQTotal, EQIntrapersonal, EQInterpersonal, EQAdaptability and EQMood. Extreme E-types differ significantly in their means scores ($\overline{x} = 107.74$) from moderately strong I-types ($\overline{x} = 101.45$) on the EQStress scale, although extreme I-type preferences display a stronger mean EQStress score ($\overline{x} = 104.42$) than the moderately strong I-type preference.

**3.2. J-P personality type preference influences on EI.** ANOVA results show that extreme J preference (J++) is associated with significantly higher EQ-i component scores on EQTotal, EQIntrapersonal, EQInterpersonal, EQStress and EQAdaptability scales, gradually declining to P-types (P, P+, P++). Significantly lower scores were found on P+ for

EQTotal ($\overline{x} = 99.45$), EQIntrapersonal ($\overline{x} = 98.88$), EQStress (X = 100.57) and EQAdaptability ($\overline{x} = 97.78$), and on P++ for EQInterpersonal (98.14) and EQAdaptability ($\overline{x} = 101.21$). These results indicate a significant positive effect of the J preference on these EQ-i components, as J++ demonstrate highest mean scores for EQTotal ($\overline{x} = 105.60$); EQIntrapersonal ($\overline{x} = 105.27$); EQInterpersonal ($\overline{x} = 103.55$); EQStress ($\overline{x} = 108.5$) and EQAdaptability ($\overline{x} = 108.34$). No significant effect was found for the J/P preference in terms of EQMood.

**3.3. N/S and T/F personality type preference influences on EI.** As is evident from Table 3, the N/S and T/F personality preference groupings have an influence on EI. Except for EQInterpersonal all the EQ composite scores for any N/S combination with T preference show consistently higher mean scores than N/S combination with F preference. In particular ANOVA results show the SF category generally reacting differently to the other N/S and T/F categories with significantly smaller mean score values on EQTotal ($\overline{x} = 99.1$), EQIntrapersonal ($\overline{x} = 95.96$), EQStress ($\overline{x} = 99.89$), EQAdaptability ($\overline{x} = 98.64$) and EQMood ($\overline{x} = 98.56$). The only difference in this trend was the SF mean scores on the EQInterpersonal relations scale ($\overline{x} = 105.31$). Here the NT and ST groupings showed significantly lower means scores (NT: $\overline{x} = 102.39$; ST: $\overline{x} = 101.58$) as opposed to the NF and SF groupings – in particular the NF grouping showing the highest EQInterpersonal mean score ($\overline{x} = 109.19$).

Table 3. ANOVA and Bonferroni test on score means for EQ-i

| | MBTI I/E-preference | | | F prob | MBTI J/P preference | | | F prob | MBI NS/TF grouping | | | F prob | MBTI EI/JP grouping | | | F prob |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| EQ | E++ | 107.963 | a | <0.0001* | J++ | 105.592 | a | <0.0001* | | | | <0.0021** | | | | <0.0001* |
| Total | E+ | 105.87 | ab | | J+ | 103.907 | ab | | NT | 104.525 | a | | EJ | 106.4281 | a | |
| | E | 103.28 | bc | | J | 103.766 | ab | | NF | 104.149 | a | | EP | 103.3103 | b | |

Table 3 (cont.). ANOVA and Bonferroni test on score means for EQ-i

| | MBTI I/E-preference | | | F prob | MBTI J/P preference | | | F prob | MBI NS/TF grouping | | | F prob | MBTI EI/JP grouping | | | F prob |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | I | 100.597 | cd | | P | 102.066 | abc | | ST | 104.055 | a | | IJ | 99.7441 | c | |
| | I+ | 97.865 | de | <0.0001* | P++ | 101.643 | bc | <0.0001* | SF | 99.096 | b | <0.0021** | IP | 96.6349 | d | <0.0001* |
| | I++ | 95.049 | e | | P+ | 99.483 | c | | | | | | | | | |
| EQ | E++ | 108.604 | a | | J++ | 105.273 | a | | | | | | EJ | 106.541 | a | |
| Intra | E+ | 106.069 | ab | | J+ | 104.205 | a | | NT | 105.085 | a | | EP | 104.297 | a | |
| | E | 103.271 | bc | <0.0001* | J | 103.659 | a | <0.0011* | ST | 104.163 | a | <0.0001* | IJ | 99.137 | b | <0.0001* |
| | I | 100.05 | cd | | P++ | 103.107 | ab | | NF | 102.617 | a | | IP | 95.778 | c | |
| | I+ | 97.541 | de | | P | 102.746 | ab | | SF | 95.962 | b | | | | | |
| | I++ | 93.317 | e | | P+ | 98.879 | b | | | | | | | | | |
| EQ | E++ | 106.931 | a | | J++ | 103.554 | a | | | | | | EJ | 105.242 | a | |
| Inter | E+ | 104.433 | ab | | J | 103.311 | a | | NF | 109.191 | a | | EP | 101.979 | a | |
| | E | 102.145 | bc | <0.0001* | J+ | 101.891 | ab | <0.0055** | SF | 105.308 | ab | <0.0001* | IJ | 96.602 | b | <0.0001* |
| | I | 98.73 | cd | | P+ | 100.69 | ab | | NT | 102.39 | b | | IP | 96.381 | b | |
| | I+ | 95.149 | de | | P | 100.582 | ab | | ST | 101.576 | b | | | | | |
| | I++ | 90.634 | e | | P++ | 98.143 | b | | | | | | | | | |
| EQ | E++ | 107.735 | a | | J++ | 108.5 | a | | | | | | EJ | 107.511 | a | |
| Stress | E+ | 106.7 | a | | J+ | 105.73 | ab | | ST | 106.349 | a | | IJ | 104.517 | ab | |
| | E | 105.103 | ab | <0.0001* | J | 104.26 | abc | <0.0001* | NT | 105.613 | a | <0.0080** | EP | 102.786 | b | <0.0001* |
| | I++ | 104.415 | ab | | P++ | 103.75 | abc | | NF | 103.66 | ab | | IP | 98.19 | c | |
| | I | 103.465 | ab | | P | 101.25 | bc | | SF | 99.885 | b | | | | | |
| | I+ | 101.446 | b | | P+ | 100.57 | c | | | | | | | | | |
| EQ | E++ | 109.065 | a | | J++ | 108.342 | a | | | | | | EJ | 108.054 | a | |
| Adapt | E+ | 107.495 | ab | | J+ | 105.628 | ab | | ST | 106.183 | a | | IJ | 103.014 | a | |
| | E | 103.939 | bc | <0.0001* | J | 104.784 | ab | <0.0001* | NT | 106.025 | a | <0.0002* | EP | 102.621 | b | <0.0001* |
| | I | 103.17 | cd | | P | 102.992 | b | | NF | 103.447 | a | | IP | 98.254 | c | |
| | I+ | 100.595 | cd | | P++ | 101.214 | bc | | SF | 98.635 | b | | | | | |
| | I++ | 99.463 | d | | P+ | 97.776 | c | | | | | | | | | |
| EQ | E++ | 107.576 | a | | J++ | 104.018 | a | | | | | | EJ | 105.663 | a | |
| Mood | E+ | 105.473 | ab | | J+ | 103.52 | a | | NT | 103.978 | a | | EP | 104.869 | a | |
| | E | 103.182 | b | <0.0001* | J | 103.093 | a | <0.4376 | ST | 103.15 | a | <0.0079** | IJ | 97.389 | b | <0.0001* |
| | I | 98.881 | c | | P | 102.75 | a | | NF | 102.83 | a | | IP | 95.667 | b | |
| | I+ | 96.122 | c | | P++ | 102.623 | a | | SF | 98.558 | b | | | | | |
| | I++ | 91.244 | d | | P+ | 100.621 | a | | | | | | | | | |

Significance level: *Prob(F) < 0.0001; **Prob(F) < 0.01;
Bonferroni multiple comparison of means tests: means within the same cell with different small letters next to them differ significantly

**3.4. I/E and J/P personality type preference influences on EI.** Lastly, results in Table 3 indicate that the I/E and J/P personality preference groupings influence EI significantly ($p < 0.0001$ for all means score differences indicated), with the EJ and EP categories associated with significantly higher EQTotal (EJ: $\bar{x} = 106.43$; EP: $\bar{x} = 103.31$), EQIntrapersonal (EJ: $\bar{x} = 106.54$; EP: $\bar{x} = 104.3$), EQInterpersonal (EJ: $\bar{x} = 105.24$; EP: $\bar{x} = 101.98$) and EQMood (EJ: $\bar{x} = 105.66$; EP: $\bar{x} = 104.87$) component scores. Similarly, IJ and IP display significantly lower EQTotal (IJ: $\bar{x} = 99.74$; IP: $\bar{x} = 96.64$) and EQIntrapersonal (IJ: $\bar{x} = 99.14$; IP: $\bar{x} = 95.78$), EQInterpersonal (IJ: $\bar{x} = 96.6$; IP: $\bar{x} = 96.38$) and EQMood (IJ: $\bar{x} = 97.39$; IP: $\bar{x} = 95.67$) mean scores. These results seem to be expected in light of the results indicated in terms of the separate E/I and J/P effects on EI above. A different effect is however shown on the EQStress and EQAdaptability scales, where significantly higher mean scores are associated with the EJ ($\bar{x} = 107.51$; $\bar{x} = 108.54$) and IJ ($\bar{x} = 104.52$; $\bar{x} = 103.04$) preference groupings.

## 4. Discussion

This study sets out to investigate the relationship between personality preferences and EI and specifically explores the effects of personality preferences on EI. A significant and clear positive relationship between Extroversion and EI emerged, congruent to the findings by Thompson (2006), Farnsworth et al. (2002), Higgs (2001), Torrington (2001) Leary et al. (2009) and Engstrom et al. (2010). Individuals with a stronger preference for Extroversion on the MBTI seem to have a greater likelihood of scoring higher on almost all of the Bar-On EQ-i subscales than that with a preference for Introversion.

In contrast however with Engstrom et al. (2010) (study with $n = 131$ police sergeants), who found no correlation between the J-P dichotomy and EI, our results indicate that the J-P preference grouping significantly influences EI, except for EQMood. Therefore although stronger J preferences are associated with higher EI, J-types are not necessarily more happy and optimistic than their P counterparts, because EQMood relates to happiness and optimism (Stein & Book, 2001). This suggests that very organized, structured and decisive personality types (J++ preference) (Boyd & Brown, 2005) may have more enhanced intrapersonal and interpersonal skills, a better ability to manage stress and stronger adaptability as defined by Bar-On (2006). Demonstrating the highest mean scores for EQStress and EQAdaptability may indicate that J++ present with higher stress tolerance and better impulse control, as well as problem solving, reality testing and flexibility (compare Bar-On EQ-i composite scale definitions for EQStress and EQAdaptability in Stein & Book, 2001). The small study ($n = 57$) by Farnsworth et al. (2002) also found significant correlations with the EI subscale scales of problem solving (a subscale of EQAdaptability) and impulse control (subscale of EQStress) in the direction of a J preference. These findings are interesting because MBTI theory proposes that P-types are usually associated with flexibility and openness to a variety of experiences (Leary et al., 2008). Three constructs, flexibility, reality-testing and problem-solving are loaded on the EQAdaptability scale (Bar-On, 2006). As a result, we propose that strong J-types may portray more confidence in their problem-solving competencies and may experience their reality-testing and thought processes more clearly and objectively than P-types, thus correcting for a potentially lower score on flexibility. The sub-constructs of each of the EQ-i composite scales were, however, not explored in detail and this interesting observation may deserve further exploration.

In terms of the S-N and T-F combination function groups, the findings of Higgs (2001) and Thompson (2006) show the N preference relating to higher EI. In our study the S-N dichotomy however did not seem to have much influence on EI and its composite scales aligning with the findings of Engstrom et al. (2010), who also found no significant relationship between EI and the S-N dichotomy. Similar to Engstrom et al. (2010), in this study we found that the T preference dominates as the function distinguishing higher EQ-i component scores in combination with either N or S preferences in terms of EQIntrapersonal (includes emotional self-awareness, assertiveness, independence, self-regard and self-actualization),

stress tolerance and impulse control (EQStress), EQAdaptability (problem-solving, reality-testing and flexibility) and EQMood (optimism and happiness). Most studies report EI to be associated with stronger Feeling preference (Leary et al., 2009; Farnsworth et al., 2002; Torrington, 2001; Dulewicz & Higgs, 1999). In our study the F preference only influenced EQInterpersonal scores: NF and SF types scored significantly higher on EQInterpersonal than NT and ST preference types. Feeling types demonstrate a stronger effect on EQInterpersonal, implying that both NF and SF types display higher levels of empathy, social responsibility and the ability to establish and maintain mutually rewarding interpersonal relations (refer to conceptualization of EQ-I composite scales in Stein & Book, 2001). An interesting finding of our study was that SF-types were found to demonstrate significantly lower intrapersonal EI and lower stress tolerance. They also seem less happy and optimistic (EQMood) and may experience more difficulty in identifying and solving problems clearly and objectively and they may find it more difficult to deal with conflict and change in the workplace (EQAdaptability).

## Conclusion

The results show that personality preferences are related to EI. Thus, although the MBTI and the EQ-i make important contributions to personal, professional and career development, managers may opt to use only the MBTI during developmental assessments to save costs. MBTI results provide inferences on EI which can enhance development strategies to include aspects of EI. Knowledge and an understanding of employees' personality preferences will assist organizations in focussed coaching, mentoring and development interventions to increase employees' EI. From the findings it is clear that strongly introverted employees potentially require additional development with regard to emotional management on intrapersonal and interpersonal levels. In particular employees with a very strong introvert personality preference may be more prone to experience stress and not communicate this to be addressed through employee assistance. Managers may furthermore not expect P-preference types to struggle with adaptability in a general sense, yet the findings show that in terms of EI, P-types may potentially struggle more with tolerating stress and controlling impulses and will benefit from adaptability coaching with regard to problem solving and reality testing. Although F-types display effective EQInterpersonal functioning, managers should take note of SF-types potentially requiring coaching and development with regard to

their Intrapersonal functioning, stress tolerance, adaptability and general mood.

Some limitations in this study should be considered when applying the findings. For one, social desirability potentially influences the results in self-report measures, yet self-report questionnaires remain the most common way of measuring personality and EI. Second, only a small portion of the sample reported their age and of these the majority fell in the 21-40 age bracket, which may have limited the effects of age. However, determining the effect of age on EI was not the primary purpose of this article. Furthermore, it is important to recognize that the current study relates to applicants within a single organization. This may both distort the results and limit the generalisability of the findings to the total population. Future research should focus on the relationship between EI and personality preferences in other organizational contexts. The effects of personality type preferences in terms of gender specific and race specific categories could be further explored to ascertain potential unique differences. Confirmatory evidence may assist in developing derived EI reporting from MBTI results. As such, the EQ-i sub-constructs' relationship with personality dimensions should also receive research attention. Exploring relationships between EI and personality preferences, as well as individual and organizational outcomes such as performance, wellbeing and satisfaction will provide additional information on when and how to use these measures.

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