

Development And Validation Of An Ability-Based Scale For Emotional Intelligence In Professionals

Manisha Gauri¹, Sakshi Shah², Muskan Lakhani³

¹Sr. Behavioural Psychologist, Value Matrix, India

²R&D Consultant, Intelion Systems, India

³Research Coordinator, Intelion Systems, India

Abstract:

Emotional Intelligence (EI) having evolved since the 1900s, centers on adeptly navigating emotions and incorporating emotional knowledge into cognitive processes. This research aimed to create and validate an EISWP questionnaire, an ability-based measure, for the precise measurement of EI among working professionals. The sample included 103 female professionals and 71 male professionals, aged 21 to 60. Initially comprising 106 items, the scale underwent item analysis to eliminate ambiguity and reduce length. The final 17-item scale demonstrated a reliability of 0.76 and a concurrent validity of 0.68, indicating high validity. EISWP questionnaire proves invaluable for assessing emotional intelligence in professionals in a corporate context.

Keywords: Emotional Intelligence, scale development, scale validation, ability-based EI measure, EISWP questionnaire, working professionals, corporate context

Date of Submission: 10-01-2024

Date of Acceptance: 20-01-2024

I. INTRODUCTION

Emotional Intelligence (EI) is defined as "a set of skills hypothesized to contribute to the accurate appraisal and expression of emotion in oneself and others, the effective regulation of emotion in oneself and others, and the use of feelings to motivate, plan, and achieve in one's life" (Salovey & Mayer, 1990).

Theoretical approaches to EI can be divided into two groups according to whether they place more emphasis on specific skills or deeper global integrations of those competencies (Cherniss, 2010; Mayer et al., 2008). Mayer and Salovey developed the Ability-Based Emotional Intelligence Model (1997) which suggested that EI is an ability like other standard intelligences and has four branches, namely, perceiving emotions, facilitating thought using emotions, understanding emotions, and managing emotions. Whereas Petrides (2001) postulated that this is a personality framework which looks at EI as a trait.

Trait v/s Ability Measures: The Controversy

Ability and trait-based measures for EI define and assess constructs differently. EI is viewed by ability tests as having the ability to bridge the gap between reason and emotion. Contrarily, trait measures consider a wide range of non-cognitive skills. According to the paradigm, emotional intelligence is made up of personality traits that may be assessed through participants' perceptions of themselves.

There are many advantages of adopting an ability-based approach over a trait model (Mayer, 2004). When EI is considered as an ability, it becomes a part of a larger family of intelligences that also includes linguistic, perceptual-organizational, spatial, social, and other types of intelligence. EI, as intelligence and more broadly as a mental ability, also becomes a part of a much larger group of attributes like personality traits, which also include traits like optimism and pessimism, extraversion and introversion, motivation, etc. Hence, it is likely that EI contributes for anywhere between one percent and ten percent of the variance in certain central and crucial life patterns and outcomes. For instance, emotional intelligence has an inverse correlation with various problem behaviours such as drug usage and violence (Gupta and Singh, 2013). Another obvious benefit of using this model in the scientific sense is that the definition of EI proposed by Mayer (2004) is comparatively uniform, straightforward, and consistent. Ability-based measurement can be applied to it without difficulty. It is congruent with the terminology that is currently used in psychology. Lastly, evidence that EI satisfies the three criteria that indicate 'an intelligence' has been offered by Mayer and colleagues. The criteria are as follows:

- The collection of abilities can be operationalized.
- These abilities demonstrate distinctive variance, but are also inter-correlated, and link to pre-existing intelligences.
- As people age, their intelligence improves which means that it shows developmental effects (Daus and Ashkansay, 2005 as mentioned in Cartwright and Pappas, 2008)

According to Pérez et al. (2005), it is important to understand that trait EI and ability EI are two different constructs. The former is measured through self-report questionnaires, whereas the latter ought to be measured through tests of maximal performance. This measurement distinction has far-reaching theoretical and practical implications. For example, trait EI would not be expected to correlate strongly with measures of general cognitive ability or proxies thereof, whereas ability EI should be unequivocally related to such measures (Pérez et al., 2005).

II. LITERATURE REVIEW

Emotional Intelligence

The idea of emotional intelligence in the workplace is very crucial. Makkar & Basu (2017) outlined four main justifications for why the workplace would be a suitable place to evaluate and develop emotional intelligence skills:

1. Employees with high EI behaved well at work.
2. The influence of EI on workplace behavior varied significantly between private and public sector banks, suggesting that workers have varying degrees of EI based on the circumstances surrounding their place of employment.
3. Employees with higher EI demonstrate better service orientation.
4. High levels of occupational stress results in aberrant work behavior.

Lakshmi & Rao (2018) concluded that EI enhances work performance by enabling people to foster healthy relationships, perform well in social situations, and establish greater social standing. The results of the research showed that EI had a direct impact on how well employees performed at work. EI promotes awareness, helps employees learn from others, shares knowledge, fosters trust and empathy for others, and shares information.

Dhani et al., (2016) examined the relationship between Emotional Intelligence (EI) and Job Performance among middle-level management in Indian organizations. The results yield that employees with high EI are better at teamwork, punctual, accurate, and more competent as compared to the ones who score low on EI.

Leadership and Emotional Intelligence.

Kapur, R. (2018) found in her study that the practical application of emotional intelligence and leadership at workplace always proves beneficial to the individuals in all ways, such as managing conflicts and disputes within the organization, organizing self-control, being trustworthy, conscientious, adaptable, goal-oriented, able to collaborate with the others in a well-organized manner, and rendering an appropriate performance in the achievement of goals and objectives of the organization.

Pasha (2016) examined key facets of emotional intelligence, including emotion evaluation and expression, emotion usage to improve cognition and decision-making, awareness of emotions, and emotion management. In the study they found that emotional intelligence contributes to effective leadership by focusing on five key elements of leader effectiveness: creation of group goals and objectives; teaching others the value of work activities; creating and maintaining enthusiasm, confidence, optimism, cooperation, and trust; promoting flexibility in decision-making and change; and creating and upholding a meaningful identity for an individual.

Researchers Krén and Séllei (2021) examined the emotional intelligence of leaders in high-performing firms and the role that emotional intelligence played in performance. According to their findings, which supported Goleman's beliefs that is, understanding our own emotions, managing them, being aware of others, and having empathy for them allow leaders to generate a pleasant, inspiring, and motivating environment for subordinates.

Measurements of Emotional Intelligence

Mayer- Salovey-Caruso Emotional Intelligence Test (MSCEIT scale)

Mayer et al. (2002) created the MSCEIT to gauge ability-based EI. The scale tests relatively separate mental processes for processing emotional data (Mayer et al., 2008). The ability to notice, understand, act on, and manage emotional information is how emotional intelligence is measured on the test. The scale consists of 141 items divided under four facets. The overall score split-half reliability was found to be higher than 0.90. Between 0.76 and 0.91 was the range of the four branch scores' internal consistency (Mayer, Salovey, Caruso & Sitarenios, 2003). Test-retest reliability for the overall score was reported as 0.86 (Brackett & Mayer, 2001). The assessment has content validity. Unfortunately, MSCEIT has several significant drawbacks. Both test takers and administrators are unable to see the MSCEIT's scoring. Independent researchers are unable to determine the internal reliability coefficients for each scale for their specific sample. It is difficult to achieve convergent validity for the MSCEIT. The MSCEIT's creators acknowledge that "its factor structure remains open for criticism" and that "the present version of the MSCEIT may be insufficient to accurately measure a person's accuracy in emotional perception" (Mayer et al., 2008, p.514).

Ability-based EI measure

Another scale created by Gupta & Singh (2013) examined emotional intelligence (EI) in an Indian context utilizing an ability-based evaluation. The instrument consists of 20 items. It is a self-report measure. It is a 5-point Likert scale. With an alpha-reliability of 0.77, the overall scale's items were found to have a high degree of internal consistency. The sample included 320 MBA candidates from Lucknow, India. The scale considered only the Indian context and this tool was validated among college students and may not be valid in another settings.

Trait Emotional Intelligence Questionnaire (TEIQue scale)

TEIQue is the assessment based on Trait Model developed by Petrides (2009). It has 153 items that measure 15 different aspects, 4 components, and the universal trait EI (Petrides, 2009). This 30-item test is intended to assess general trait emotional intelligence. The test has an overall reliability of 0.80 and concurrent validity. However, there are many limitations. The incremental validity of the TEIQue and TEIQue-SF must be thoroughly examined (Mikolajczak et al., 2007; Swami et al., 2010). The same is true for additional typical-performance EI scales, which are best interpreted using the trait EI framework (Petrides & Furnham, 2001b).

The 15 facets that make up the TEIQue instruments do not seem to produce the best representation of the construct, even though there is evidence that the TEIQue outperforms other trait EI measures psychometrically in terms of construct validity (Freudenthaler et al., 2008). Many pieces of evidence are starting to show that several of the features are redundant and unnecessarily undermine the construct validity of the measure, particularly its criterion validity (Siegling, Petrides, et al., 2014).

Genos EI Inventory

Genos EI Inventory was developed by Palmer & Stough, (2001). The inventory has 70 items and 7 dimensions. The internal consistency reliability was found to be 0.90 and test-retest reliability was 0.83 and 0.72 based on two-month and six-month time intervals for Genos EI total scores respectively.

There are a few drawbacks to the inventory. First off, it is important to remember that the Genos EI inventory should not be used in "generic" circumstances. The Genos EI inventory is tailored to the workplace. To be consistent with the observed age range within the Genos EI inventory norms, it should also be emphasized that the Genos EI inventory was designed to be delivered to adults (18+), not children or adolescents (17 or younger). Genos EI tracks the frequency with which people engage in 70 emotionally intelligent workplace activities that serve as an effective way to display emotional intelligence in the workplace, rather than measuring emotional intelligence (EI) per se.

Work Group Emotional Intelligence Profile- Short Version Scale

The scale was developed by Jordan & Lawrence (2009) to measure the EI of individuals in teams. The measure is based on the ability-based model of EI. The scale consists of a total of 16 items and has 4 dimensions namely self-awareness, self-management, others awareness, others management. It is a self-report measure with a 7-point Likert scale, where 1= strongly disagree to 7 = strongly agree. It is reported that the scale has overall reliability as 0.89.

Significance of our study

As a widely studied topic, an emerging need was felt to make an Emotional Intelligence scale that was specifically for the global corporate population. It was also indicated by the above-mentioned studies that EI has an instrumental role to play at the workplace and in the business outcomes of the organization.

Additionally, there was a dearth of EI measurements that were based on the ability-based model. The already well-established tests on EI like the infamous Mayer- Salovey-Caruso Emotional Intelligence Test (MSCEIT scale) had several limitations pertaining to its validity. There was also a lacuna of EI assessments that were specifically for working professionals in the corporate world. Hence, a need for a test measuring EI based on the ability model for working professionals from all over the world was felt.

Considering the above-mentioned gaps in knowledge, the current test developers propose that it is important to gain a deeper insight in this aspect and construct a test on EI which is developed and standardized on corporate employees from different geographies around the world and employing an ability-based construct to assess EI.

III. METHODOLOGY

Item generation and first pilot run

A preliminary pool of items illustrating various components of EI were prepared for our scale so that they roughly approximate the items of the Ability-based EI measure by Gupta and Singh (2013). These items were supplemented by a review of the relevant literature and operational definitions of their variables. This pool

contained only fifteen items, which were updated and reworded after being administered and discussed with Intelion Systems colleagues.

Item formatting, addition, and generation of an elaborate item pool

Based on the suggestions by colleagues, a need was felt to have a larger item pool which can be administered and standardized on a larger sample of corporate employees. Hence, a pool of 106 items on the four main factors of ability-based emotional intelligence model was generated. The number of questions on each of the four factors were:

- Managing Emotions – 24 questions
- Perceiving Emotions - 33 questions
- Facilitating Thoughts using Emotions – 24 questions
- Understanding Emotions – 25 questions

To make the items more familiar to corporate employees across the globe, common foreign names, and corporate situations and contexts were represented more in this pool of items. All the items were multiple-choice questions. The researchers named the 106-item test as the Emotional Intelligence Scale for Working Professionals (EISWP).

Administration of entire item pool to a large sample

The EISWP questionnaire consisting of 106 items, six research questions and seven items measuring demographic details was administered to 174 corporate employees of the firm ShoreWise Consulting. Along with this, the Ability-based EI measure of 20 items by Gupta and Singh (2013) was also administered to the same sample as a criterion test to determine the criterion validity of the new questionnaire. Both the constructed and the criterion test were administered online using the platform of Microsoft forms.

Out of the 174 respondents, 103 (59.2%) were female professionals and 71 (40.8%) were male professionals.

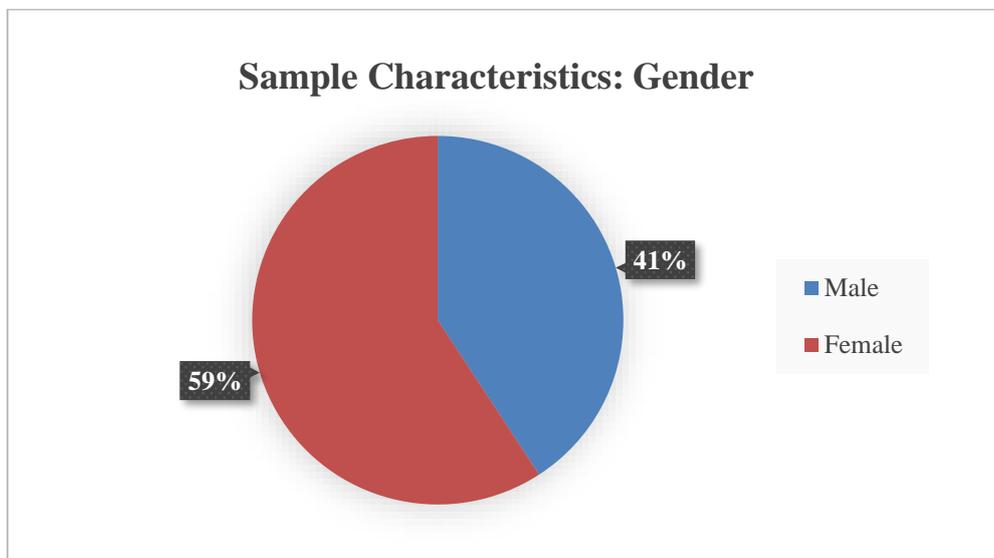


Figure 3.1: Number and Percentage of Gender Distribution in the Sample

The average age of the employees was 30 with the lowest age of 21 years and highest of 60 years. Most employees fell under the age group of 21-30 years (58%).

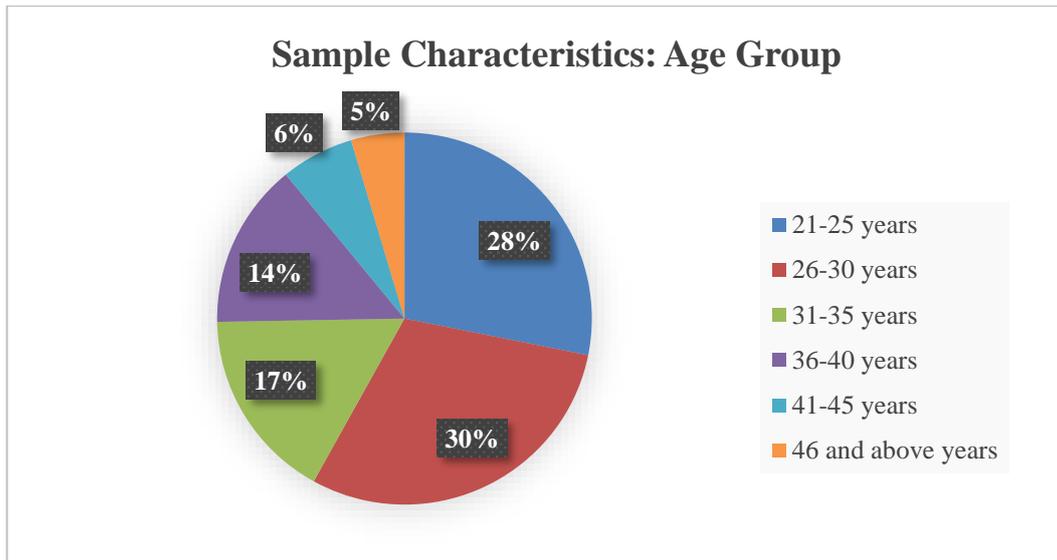


Figure 3.2: Number and Percentage of Age Group Distribution in the Sample

In terms of work experience, 58.6% of employees had 0 to 5 years of experience; whereas only 0.02% had 20 or above years of work experience. All the employees were a part of different departments and from different fields of specialization.

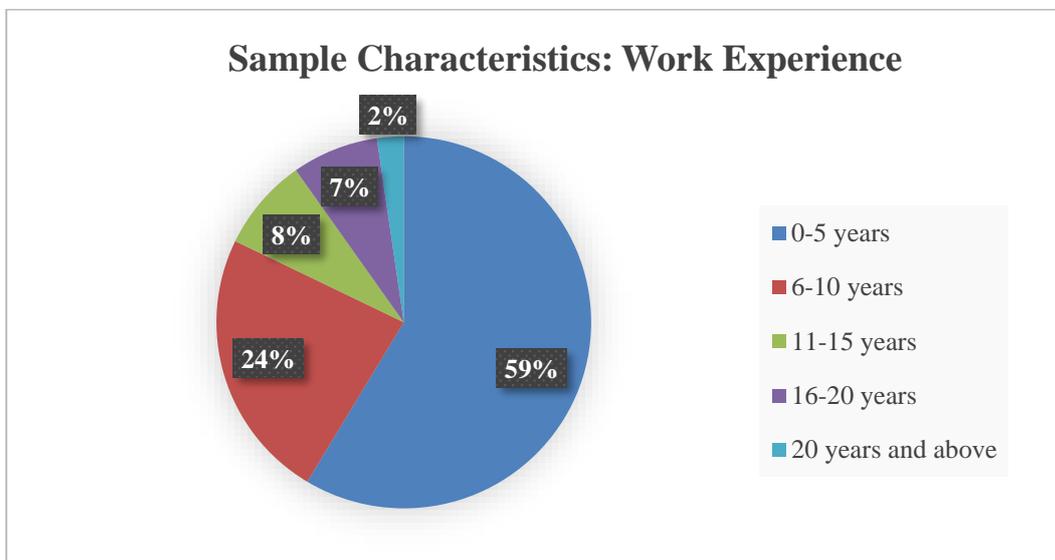


Figure 3.3: Number and Percentage of Work Experience Distribution in the Sample

Data was collected in April and May 2022. Permissions were taken from the CEO of ShoreWise Consulting and from the respective team managers. After the permissions were granted, the test developers arranged group calls with all the teams of ShoreWise Consulting. The employees were requested to fill in the online form while they were in the meeting with the test developers. This was done to ensure standardized administration of the EI scale. An opt-out procedure was used, whereby professionals who did not wish to be a part of the survey, could choose to leave the meeting. The researchers interacted with the participants and built a rapport, by introducing themselves and stating the purpose of the study. They were given an idea as to what to expect from the questionnaire and assured that it was for the purpose of product development at their firm. Any doubts or queries were clarified. This also ensured that everyone is genuinely responding to the test and not filling it out just for the sake of it. After the professionals filled in the form, feedback about their experience and any difficulties faced were taken into account.

The data was analyzed using Excel and SPSS Version 20.0.1.0 (171).

IV. RESULTS AND DISCUSSION

Reliability

In the present study, the reliability of the EISWP was estimated by using Cronbach's Alpha (α) to check the internal consistency of the test. This method uses the variance of scores of odd, even and total items to work-out the reliability of the test. The value of alpha for the 106-items test was found to be 0.826696508 which indicated that the scale items have good internal consistency. It was thus concluded that the test is highly reliable.

Validity

Next, the criterion-related validity of the test was computed to judge how adequately a test score can be used to infer an individual's most probable standing on that criterion. There are two types of validity evidence subsumed under criterion related validity: - Concurrent Validity and Predictive Validity. Since the scores of the EISWP and the criterion measure of Ability-based EI measure by Gupta and Singh (2013) were available simultaneously, concurrent validity was calculated.

Concurrent validity was by a statistical technique by correlating the scores earned on the present test with the scores earned on any other valid test. EISWP was correlated with Ability-based EI measure by Gupta and Singh (2013), which is an established measure for ability-based EI. The concurrent validity of 0.687781383 was obtained. As the value indicates an above average correlation, it was concluded that the EISWP is a valid tool to measure EI in corporate employees.

Item Analysis

To improve the items of EISWP and shorten the length of the scale, the researchers calculated item analysis of each item which helps in eliminating ambiguous or misleading items or in modifying the item framing. Item analysis consisted of:

- An index of the item's difficulty
- An index of item discrimination
- An index of the item's reliability
- An index of the item's validity

Item Difficulty Index

Item difficulty index for each item was calculated. It is considered ideal if item-difficulty index of per item ranges from 0.3 to 0.8 and item indices ranging above or below them should be subjected to reframing or should be eliminated or substituted by another item (Cohen, Swerdlik & Struman, 2015). The obtained item-difficulty index values of each of the 106 items in EISWP are shown in table 4.1. As can be seen in the table, most of the indices ranged between 0.3 and 0.8 which is optimum and ideal.

Also, an index of difficulty of the current test was calculated by averaging the item-difficulty indices for all the test's items. The average item-difficulty index of the entire test came to 0.752819345 which is the optimal average item-difficulty range indicating that the test items are overall of optimum difficulty.

Item Discrimination Index

Measures of item discrimination indicate how adequately an item separates or discriminates between high scorers and low scorers on an entire test. In the current item discrimination procedure, the upper and lower 27% of the distribution of scores was referred to as 'high scorers' and 'low scorers' respectively, as any percentages between 25 and 33 can be taken and that will yield similar estimates (Allen & Yen, 1979 as cited in Cohen, Swerdlik & Struman, 2015). The total number of test takers in the higher and lower range of scores according to 27% criteria of demarcating upper and lower range came to 94 i.e. 47 in the low scoring group and 47 in high scoring group. The item-discrimination indices of each item have been presented in table 4.1. As can be seen in the table, the item-discrimination ranged from -0.14893617 to 0.255319149. The items having discrimination index in negative were discarded from the pool.

Item Reliability and Validity

Item reliability and validity was computed for all 106 items in the EISWP. The item reliability of the items in EISWP ranged from -0.11 to 0.66 and the validity ranged from -0.12 to 0.47. The reliability and validity values for each item are presented in table 4.1. Table 4.1: Item reliability and item validity indices for each item of EISWP

Table 4.1: Item Analysis Indices for 106-item EISWP

Item number	Item difficulty	Item discrimination	Item reliability	Item validity
1*	0.454022989	0.095744681	0.167315451	0.23467295

2*	0.942528736	0.010638298	0.13241835	0.11809318
3*	0.925287356	0.042553191	0.103683092	0.032139668
4*	0.83908046	0.053191489	0.138082342	0.034173311
5*	0.603448276	0.117021277	0.28673964	0.242253507
6*	0.816091954	0.191489362	0.362327926	0.279210409
7	0.75862069	0.106382979	0.288903665	0.336551036
8*	0.672413793	0.074468085	0.022395788	-0.035875896
9*	0.752873563	0.20212766	0.351105015	0.296472728
10*	0.459770115	0.042553191	0.004675796	-0.053003089
11*	0.385057471	0.095744681	0.22638209	0.176359418
12*	0.948275862	0.085106383	0.346689402	0.223072402
13*	0.724137931	0.170212766	0.144702009	0.153577211
14	0.528735632	0.212765957	0.599837861	0.355211907
15*	0.902298851	0.117021277	0.185238085	0.07035324
16*	0.649425287	0.127659574	0.264801674	0.244645233
17*	0.954022989	0.031914894	0.065088385	0.061988954
18	0.609195402	0.255319149	0.657008164	0.414971285
19*	0.735632184	0.042553191	0.092887982	-0.118322893
20*	0.890804598	0.138297872	0.326440127	0.279298241
21*	0.637931034	0.138297872	0.400354734	0.163488687
22*	0.936781609	0.095744681	0.346834504	0.186433045
23*	0.614942529	0.042553191	0.124345158	0.019978347
24	0.816091954	0.180851064	0.62800772	0.477034558
25*	0.764367816	0.170212766	0.375196999	0.320511605
26*	0.810344828	0.063829787	0.146843519	0.053881407
27*	0.827586207	0.159574468	0.294232422	0.217126867
28*	0.706896552	0.085106383	0.24585832	0.101020037
29*	0.873563218	0.095744681	0.230499993	0.232315005
30*	0.804597701	0.074468085	0.260651249	0.088473608
31*	0.856321839	0.138297872	0.309580742	0.3024588
32*	0.971264368	0.010638298	0.038799852	0.008607512
33*	0.212643678	0.021276596	0.075768414	0.037119053
34*	0.850574713	0.106382979	0.158524253	0.118930959
35*	0.735632184	0.159574468	0.373168068	0.24279401
36*	0.925287356	0.053191489	0.158624324	0.105175155
37*	0.798850575	0.095744681	0.209887962	0.00835753
38*	0.942528736	0.074468085	0.080314118	0.014694929
39*	0.896551724	0.127659574	0.332064092	0.314207987
40*	0.574712644	0.063829787	0.184404998	0.102519933
41*	0.471264368	-0.031914894	0.033038291	0.016417783
42*	0.890804598	0.074468085	0.289248909	0.288270593
43*	0.436781609	0.053191489	0.361577397	0.13903092
44*	0.729885057	0.170212766	0.330395415	0.222119765

Development And Validation Of An Ability-Based Scale For Emotional Intelligence In Professionals

45*	0.781609195	0.106382979	0.242490946	0.185831735
46*	0.522988506	0.074468085	0.190997145	0.040139114
47*	0.83908046	0.042553191	0.33972199	0.319403574
48	0.683908046	0.127659574	0.348818403	0.339935937
49	0.936781609	0.106382979	0.506567109	0.424403065
50	0.74137931	0.127659574	0.525415396	0.460832976
51	0.534482759	0.180851064	0.37298544	0.284297895
52*	0.931034483	0.117021277	0.395371221	0.301053492
53*	0.310344828	-0.14893617	-0.003647571	-0.067941245
54*	0.867816092	0.117021277	0.354482396	0.279527955
55*	0.787356322	0.117021277	0.327828606	0.245672189
56*	0.206896552	0.010638298	0.020992299	-0.056144764
57*	0.873563218	0.063829787	0.126294032	0.113167845
58*	0.816091954	0.031914894	0.184792771	0.135328473
59*	0.890804598	0.085106383	0.256818547	0.214795947
60*	0.798850575	0.085106383	0.282299009	0.154658217
61	0.408045977	0.106382979	0.397310087	0.413370044
62*	0.91954023	0.053191489	0.051136049	0.072549034
63*	0.729885057	0.191489362	0.379192315	0.167427604
64*	0.218390805	-0.031914894	-0.07906824	-0.119768739
65*	0.471264368	0.14893617	0.208614565	0.062137592
66*	0.959770115	0.074468085	0.359520948	0.172251594
67*	0.655172414	0.042553191	0.145337457	0.044949592
68*	0.913793103	0.117021277	0.42033632	0.265792419
69	0.649425287	0.223404255	0.438091337	0.366157095
70*	0.643678161	0.106382979	0.163212558	0.09212876
71*	0.545977011	-0.074468085	-0.02683892	-0.030038462
72	0.74137931	0.191489362	0.412878563	0.385324688
73*	0.827586207	0.117021277	0.229309154	0.233659507
74*	0.885057471	0.170212766	0.501338423	0.350205496
75*	0.82183908	0.031914894	0.101871815	0.047294025
76*	0.701149425	0.053191489	0.119534267	0.099898493
77*	0.436781609	-0.063829787	-0.110112625	-0.120545713
78*	0.873563218	0.14893617	0.461172608	0.232409593
79*	0.683908046	-0.074468085	-0.011800819	-0.044780685
80*	0.971264368	0.031914894	0.094979457	-0.012465354
81*	0.873563218	0.042553191	0.172849352	0.073765166
82*	0.988505747	0.010638298	0.102189539	0.053523323
83*	0.804597701	0.117021277	0.292678827	0.192216429
84*	0.643678161	0.053191489	0.190739464	0.143686003
85	0.913793103	0.14893617	0.488236687	0.476021114
86*	0.890804598	0.042553191	0.142260288	-0.008762907
87*	0.896551724	0.031914894	0.168641385	0.132936747

88*	0.931034483	0.042553191	0.159637538	0.154874418
89*	0.902298851	0.042553191	0.191707646	0.208627455
90*	0.775862069	0.031914894	0.113224819	-0.032876103
91*	0.850574713	0.159574468	0.406859319	0.240990081
92*	0.913793103	0.106382979	0.366583426	0.314194475
93	0.862068966	0.159574468	0.385018923	0.269528647
94	0.747126437	0.223404255	0.442246766	0.339658929
95*	0.890804598	0.085106383	0.15005078	0.085831898
96*	0.850574713	0.106382979	0.421234453	0.25007729
97*	0.793103448	0.085106383	0.211038774	0.222829175
98	0.672413793	0.234042553	0.471977725	0.366096289
99*	0.994252874	0.010638298	0.154949233	0.152874557
100*	0.873563218	0.074468085	0.290244611	0.099439065
101*	0.844827586	0.042553191	0.082395586	0.065617081
102*	0.643678161	0.085106383	0.221536174	0.200080749
103	0.896551724	0.127659574	0.661373742	0.449989132
104*	0.770114943	0.117021277	0.186456444	0.085034656
105	0.522988506	0.223404255	0.490365688	0.378926482
106*	0.833333333	0.095744681	0.109887466	0.17089358
* Items dropped				

With a need for nearly equal numbers of items across all four sub-factors, the scale was reduced based on the four indices of item analysis. Thus, Items with reliability and validity indices above 0.25 and acceptable difficulty and discrimination values were chosen for further exploration. All other items were dropped from the scale. The items, thus selected, were: 7, 14, 18, 24, 48, 49, 50, 51, 61, 69, 72, 85, 93, 94, 98, 103, and 105. The selected items are marked within Table 4.1.

Cronbach’s Alpha and Concurrent Validity of the short EISWP

To verify the scale's internal consistency dependability, Cronbach's Alpha reliability coefficients were determined for the entire scale and for each factor independently. In addition, item-total correlation coefficients were examined to determine whether each item in the test measured the approach intended to be measured or not. The results regarding the Cronbach’s Alpha reliability coefficients and item-total test correlations values are presented in Table 4.2.

Table 4.2: Item-Total Correlation Tests for Items and Cronbach’s Alpha Confidence Coefficients

Item	Corrected Item-Total Correlation	Cronbach’s Alpha if Item Deleted
1	0.209	0.755
2	0.342	0.747
3	0.366	0.743
4	0.368	0.742
5	0.284	0.749
6	0.432	0.739
7	0.319	0.747
8	0.230	0.754
9	0.390	0.741
10	0.302	0.748
11	0.282	0.750
12	0.394	0.742
13	0.437	0.742
14	0.399	0.741
15	0.334	0.745
16	0.521	0.730
17	0.342	0.745
Scale ($\alpha = .76$)		

The reliability of the entire 17-item scale was found to be 0.76 which is high and signified high correlation amongst the selected scale items. The 17 items showed good consistency amongst them implying that they are measuring same construct. The concurrent validity of the 17 items test was found to be 0.68 which signified that it is highly valid.

As shown in Table 4.2, the item analysis results indicate that the item-total test correlation values vary between .209 to .521. The corrected item-total correlations were all positive and above the recommended level of 0.2, which is a validity proof of the scale items' validity (Shen et al., 2018). When individual items were deleted, Cronback Alpha (α) remained stable.

In the light of these results, it can be assumed that the survey questionnaire items measure the same construct.

V. CONCLUSION

The development of emotional intelligence is crucial because it helps people not only perform effectively at work but also achieve many other goals and objectives in their personal and professional lives. It is a form of cognitive intelligence that entails comprehending one's own emotions as well as those of others. It also entails trying to improve one's management and leadership abilities in order to function to the best of one's ability.

The many leadership functions are coercive, authoritative, affiliative, democratic, pacesetter, and coaching since there are people who carry out leadership roles inside a company. A person who has properly developed emotional intelligence will be able to form all organizational functions, including planning, controlling, coordinating, staffing, directing, and organizing, as well as the leadership role. The practical application of emotional intelligence always proves beneficial to the individuals in all ways, including management of conflicts and disputes within the organization, organizing self-control, being trustworthy, conscientious, adaptable, achievement oriented, able to collaborate with the others in a well-organized manner, and rendering an appropriate performance in the achievement of goals and objectives of organization.

Implications

There are many implications of EISWP. One of them is during an interview, recruiters may obtain a sense of whether a candidate seems to have a high EI, but this impression may not be correct, and it may be challenging to compare impressions across prospects. This test can offer a dependable and objective assessment of EI during the employment process. The outcomes enable fair comparisons between contenders. The EI test can show which applicants will perform well in this area when EI is thought of as a key talent for success in a career. When hiring for customer-facing, sales, leadership, and other positions, the test can be considered.

Limitations

The EISWP is not without limitations. The study's results were not fully encouraging despite strictly following the steps required for scale development. The four components i.e., perceiving emotions, facilitating thoughts using emotions and managing emotions weren't extracted in the factor analysis. Additionally, the scale is found to be valid only in the workplace setting as of now. Application in different settings would require reframing and recontextualizing of several items in the test. Additionally, the standardization of the scale was conducted among a small sample of 174 corporate employees pertaining to a single firm, thus additional research can be conducted in this area to study the validity of the scale in different cultures and different field of work. Finally, since the samples came from various geographical regions, future research might concentrate on the global application of this scale.

REFERENCES

- [1]. Allen, M. J., & Yen, W. M. (1979). *Introduction To Measurement Theory*. Monterey, Ca: Brooks/Cole.
- [2]. Brackett M., & Mayer J. D. (2001). Comparing Measures Of Emotional Intelligence. Paper Presented At The Third Positive Psychology Summit (Washington, Dc:)
- [3]. Cartwright, S., & Pappas, C. (2007). Emotional Intelligence, Its Measurement And Implications For The Workplace. *International Journal Of Management Reviews*, 10(2), 149–171. <https://doi.org/10.1111/J.1468-2370.2007.00220.X>
- [4]. Cherniss, C. (2010). Emotional Intelligence: Toward Clarification Of A Concept. *Industrial And Organizational Psychology*, 3, 110–126.
- [5]. Cohen, R. J., Swerdlik, M. E. & Struman, E. D. (2015). *Psychological Testing And Assessment: An Introduction To Tests And Measurement* (8th Edition). India: Mcgraw Hill.
- [6]. Daus, C. S., & Ashkanasy, N. M. (2005). The Case For The Ability-Based Model Of Emotional Intelligence In Organizational Behavior. *Journal Of Organizational Behavior*, 26(4), 453–466. <https://doi.org/10.1002/job.321>
- [7]. Dhani, P. (2016). Relationship Between Emotional Intelligence And Job Performance: A Study In Indian Context. *Indian Journal Of Science And Technology*, 9(1), 1–12. <https://doi.org/10.17485/Ijst/2016/V9i47/103064>
- [8]. Freudenthaler, H. H., Neubauer, A. C., Gabler, P., Scherl, W. G., & Rindermann, H. (2008). Testing And Validating The Trait Emotional Intelligence Questionnaire (Teique) In A German-Speaking Sample. *Personality And Individual Differences*, 45(7), 673–678. <https://doi.org/10.1016/J.Paid.2008.07.014>
- [9]. Gupta, V., & Singh, S. (2013). Developing A Scale For Measuring Ability-Based Emotional Intelligence In Indian Context. *International Journal Of Indian Culture And Business Management*, 6(3), 274. <https://doi.org/10.1504/Ijicbm.2013.053103>

- [10]. Jordan, P. J., & Lawrence, S. (2009). Emotional Intelligence In Teams: Development And Initial Validation Of The Short Version Of The Workgroup Emotional Intelligence Profile (Weip-S). *Journal Of Management & Organization*, 15(4), 452–469. <https://doi.org/10.5172/jmo.15.4.452>
- [11]. Kapur, R. (2018). Emotional Intelligence At The Workplace. Researchgate. https://www.researchgate.net/publication/323725847_Emotional_Intelligence_At_The_Workplace
- [12]. Krén, H., & Séllei, B. (2020). The Role Of Emotional Intelligence In Organizational Performance. *Periodica Polytechnica Social And Management Sciences*, 29(1), 1–9. <https://doi.org/10.3311/Ppso.15879>
- [13]. Lakshmi, K., & Rao, K. (2018). A Study On Role Of Emotional Intelligence On Employee Performance. Researchgate. https://www.researchgate.net/publication/324219609_A_Study_On_Role_Of_Emotional_Intelligence_On_Employee_Performance
- [14]. Makkar, S., & Basu, S. (2017). The Impact Of Emotional Intelligence On Workplace Behaviour: A Study Of Bank Employees. *Global Business Review*, 20(2), 458–478. <https://doi.org/10.1177/0972150917713903>
- [15]. Mayer, J. D. (Ed.). (2004). Have The Originators Of Ei Missed The Point Of Their Own Research? In *Controversies In Emotional Intelligence* (Pp. 4–6). Unh Personality Lab. https://scholars.unh.edu/cgi/viewcontent.cgi?article=1004&context=personality_lab
- [16]. Mayer, J. D., & Salovey, P. (1997). What Is Emotional Intelligence? In P. Salovey & D. J. Sluyter (Eds.). *Emotional Development And Emotional Intelligence: Educational Implications*, 3–34.
- [17]. Mayer, J. D., Salovey, P., & Caruso, D. R. (2002). The Mayer-Salovey-Caruso Emotional Intelligence Test (Msceit), Version 2.0. Toronto, Canada: Multi Health Systems.
- [18]. Mayer, J. D., Salovey, P., & Caruso, D. R. (2008). Emotional Intelligence: New Ability Or Eclectic Traits? *American Psychologist*, 63, 503–517.
- [19]. Mayer, J. D., Salovey, P., Caruso, D. R., & Itarenios, G. (2003). Measuring Emotional Intelligence With The Msceit V2.0. *Emotion*, 3, 97–105.
- [20]. Mikolajczak, M., Menil, C., & Luminet, O. (2007). Explaining The Protective Effect Of Trait Emotional Intelligence Regarding Occupational Stress: Exploration Of Emotional Labour Process. *Journal Of Research In Personality*, (41) 5, 1107–1117. <https://doi.org/10.1016/j.jrp.2007.01.003>
- [21]. Palmer, B., & Stough, C. (2001). SUEIT: Swinburne University Emotional Intelligence Test: Interim Technical Manual V2. Organisational Psychology Research Unit, Swinburne University: Australia.
- [22]. Pérez J.C., Petrides K.V., & Furnham A. (2005). Measuring trait emotional intelligence. *Emotional Intelligence: An International Handbook*, 181–201.
- [23]. Petrides, K. V. (2001). A psychometric investigation into the construct of emotional intelligence (Doctoral dissertation). University College London.
- [24]. Petrides, K. V. (2009). Psychometric Properties of the Trait Emotional Intelligence Questionnaire (TEIQue). In *Plenum series on human exceptionality* (pp. 85–101). https://doi.org/10.1007/978-0-387-88370-0_5
- [25]. Petrides, K. V., & Furnham, A. (2001b). Trait emotional intelligence: psychometric investigation with reference to established trait taxonomies. *European Journal of Personality*, 15(6), 425–448. <https://doi.org/10.1002/per.416>
- [26]. Radha, B., & Shree, B. (2017). Impact of emotional intelligence on performance of employees and organizational commitment in software. ResearchGate. https://www.researchgate.net/publication/330350978_Impact_of_Emotional_Intelligence_on_Performance_of_Employees_and_Organizational_Commitment_in_Software_Industry
- [27]. Salovey, P., & Mayer, J. D. (1990). Emotional intelligence. *Imagination, Cognition and Personality*, 9(3), 185–211. <https://doi.org/10.2190/dugg-p24e-52wk-6cdg>
- [28]. Swami, V., Begum, S., & Petrides, K.V. (2010). Associations between trait emotional intelligence, actual-ideal weight discrepancy, and positive body image. *Personality and Individual Differences*, (49) 5, 485– 489. <https://doi.org/10.1016/j.paid.2010.05.009>
- [29]. Siegling, A. B., Vesely, A. K., Petrides, K. V., & Saklofske, D. H. (2015). Incremental validity of the trait Emotional Intelligence Questionnaire–Short Form (TEIQue–SF). *Journal of Personality Assessment*, 97(5), 525–535. <https://doi.org/10.1080/00223891.2015.1013219>
- [30]. Swami, V., Begum, S., & Petrides, K. V. (2010). Associations between trait emotional intelligence, actual–ideal weight discrepancy, and positive body image. *Personality and Individual Differences*, 49(5), 485–489. doi:10.1016/j.paid.2010.05.009
- [31]. Syed Mansoor Pasha. (2016). INSPIRING LEADERSHIP THROUGH EMOTIONAL INTELLIGENCE. *International Research Journal of Engineering and Technology (IRJET)*, 03(06). <https://www.irjet.net/archives/V3/i6/IRJET-V3I6318.pdf>