

ADAPTATION AND VALIDATION OF THE TROMOSO SOCIAL INTELLIGENCE SCALE (TSIS): A STUDY OF INDIAN WORKING PROFESSIONALS

1. **Dr. Shilpa Jain**, Assistant Professor, University School of Management Studies, Guru Gobind Singh Inderprastha University, Delhi . E-Mail : shilpajain.usms@gmail.com Phone : 9811131416

2. **Dr. Bhavna Bajaj**, Research Scholar, University School of Management Studies, Guru Gobind Singh Inderprastha University, Delhi (Corresponding Author). E-Mail: bhavnabajaj16@gmail.com . Phone : 9818992064(**Corresponding Author**)

ABSTRACT :

Despite an intuitive agreement among researchers regarding the importance of Social Intelligence at the modern workplace, research in this regard has been sporadic and inconclusive. The current work addresses this through four separate studies. Study 1 (n = 207) tests the psychometric properties of TSIS in the Indian population, and puts forth a shortened (10 item) version ($\alpha = .90$) while Study 2 (n= 299) establishes the convergent validity of this instrument. In Study 3 (n=317), Social Intelligence scores of Indian executives are linked to supervisor ratings of their workplace performance providing evidence of linkage between Social Intelligence and employee performance; Study 4 (n=482) demonstrates that Social Intelligence varies significantly among High and Low performers. The results demonstrate that Social Intelligence positively and significantly impacts specific aspects of employee performance. The current work provides evidence of impact of Social Intelligence in organizational contexts, and provides a reliable instrument for the same.

KEYWORDS: Emotional -Social Intelligence, Employee Performance, Social Intelligence, TSIS Validation Studies, Indian employees.

Article Received: 10 August 2020, Revised: 25 October 2020, Accepted: 18 November 2020

1. INTRODUCTION

Nearly a hundred years ago, Thorndike (1920) suggested that academic intelligence and social intelligence are two distinct entities. He termed one's capacity to "understand and manage men and women, boys and girls, to act wisely in human relations" (p.108) as "Social Intelligence". Several researchers, have since, built upon this definition to expand the scope of the term. Marlowe (1986) said the Social Intelligence as "the ability to understand the feelings, thoughts, and behaviours of persons, including oneself, in interpersonal situations and to act appropriately upon that understanding" (p.461). Vernon (1933) defined it as "ability to get along with people in general, social technique or ease in society, knowledge of social matters, susceptibility to stimuli from other members of a group, as well as insight into the temporary moods or underlying personality traits of strangers" (p. 44).

While researchers do not fully agree on a cohesive definition of Social Intelligence, there is hardly any doubt regarding its importance at the workplace. Several studies have shown that a host of social competencies (e.g., empathy, social sensitivity, social insight, sociability, self-monitoring), resulting presumably from high social intelligence, are positively associated with team performance

and team leadership (Bass, 1990; Zaccaro, Foti, & Kenny, 1991). In fact, Albrecht's (2006) definition of Social intelligence as *the ability to get along with others and the ability to get them to cooperate with you* is the veritable definition of management itself.

Although Social Intelligence is a real individual characteristic (Silvera, Martinussen & Dahl., 2001) and the beginning of efforts to measure it date back to Thorndike (Kihlstrom & Cantor, 2000), tools for its measurement remain scarce. In the current work, researchers have adapted the popular Tromoso Social Intelligence Scale (TSIS) for use among Indian respondents; and examined convergent and predictive validity of the instrument through four separate studies.

2. Theoretical background

Ford and Tisak's description of Social Intelligence as "one's ability to accomplish relevant objectives in specific social settings" (Ford & Tisak, 1983, p.197.) illustrates why the concept of Social Intelligence should be of great interest to management scientists. However, research regarding Social Intelligence (as a stand-alone concept) has been patchy owing to a multiplicity of definitions; and the presence of overlapping concepts such as Emotional Intelligence (Rodman, 2016a). Management scientists have studied Social

Intelligence mainly in conjunction with emotional competencies (Boyatzis, 2009) and have linked it to variables such as effective leadership (Riggio & Reichard, 2008); interpersonal justice (Nazarpoori, 2017) and conflict management (Boyatzis, Good & Massa, 2012). Nevertheless, ever since Goleman and Boyatzis (2008) suggested that Social Intelligence predicts yearly performance appraisals more powerfully than Emotional Intelligence, there has been a resurgence of interest in the Social Intelligence as a separate, possibly larger concept (Kobe, Reiter-Palmon & Rickers, 2001), especially since workplaces are being recognised as social systems (Pfeffer & Salancik, 2003). It has been asserted that conflicts in everyday social interactions can be prevented by high Social Intelligence (Birknerova, 2011). Jurková and Ferencová (2010) have also posited that well-developed socio-psychological competences accelerate adaptation to concrete environment and thus enable active working. In a study of Tehran's brokerage firms, Moghaddam, Ghadiri and Kermani (2013) demonstrated that there is a significant relationship between social intelligence of the firm leader and the firm performance. However empirical research in this regard is scarce at best with only a handful of studies being available, especially in the Indian context. Lathesh and Advani (2018) recently linked Social Intelligence to Employee performance in the Insurance sector. Other researchers have only examined Social Intelligence in context of smaller intermediate variables in Organizational Psychology rather than overall performance. Nazarpoori (2017) suggests that a leader's social intelligence is positively linked to team members' perception of organizational justice; and Shojaeyan (2016) suggests that social intelligence of team members impacts overall effectiveness of hospital teams. A paucity of hard evidence regarding the role of Social Intelligence at the workplace has impeded the development of the concept despite its great, and enduring promise. A thorough investigation of any variable can only be undertaken if efficient measurement instruments are available; and when there is sufficient clarity regarding its underlying factor structure. In case of Social Intelligence, though researchers have propounded several components of the construct, yet acceptable measurement instruments are scarce. The various models and definitions of Social Intelligence incorporate, to varying degrees, two basic elements (1) social awareness or the awareness of the social context of interpersonal relations (2) the ability to influence or manage behaviours by adapting by acting 'wisely'. This is summed up elegantly by Björkqvist, Österman and Kaukiainen (2000) who define a socially intelligent individual as "one who is capable of producing

adequate behaviour for the purpose of achieving desired social goals" (Björkqvist et al., 2000, p.192).

Despite prolific literature on the nature of Social Intelligence itself, measurement of the construct continues to be a challenge. The available measures of Social Intelligence can be grouped into two main categories (1) self-report such as The Chapin Social Insight Test (CSIT) (Chapin, 1942) and the Tromsø Social Intelligence Scale (TSIS) (Silvera, Martinussen, & Dahl, 2000) and (2) Performance Based or Situational Judgement Tests such as Magdeburg Test of Social Intelligence (MTSI) (Conzelmann, Weis, & Süss, 2013) and George Washington Social Intelligence Test (GWSIT) (Hunt, 1920). Each of these tests use very specific, and mutually distinct conceptualisations of Social Intelligence that involve components such as Social Memory, Social Perceptiveness, Social Competence etc. defined differently in each particular case; and thus studies using these measures can hardly be compared with each other which in turn impedes further empirical investigation.

Among these measures, owing to their ease of use, only self-report instruments have been used widely enough to be considered reliable. One of the most popular self-report instruments for measurement of Social Intelligence is the Tromsø Social Intelligence Scale developed by Silvera, Martinussen and Dahl (2000, 2001).

The Tromsø Social Intelligence Scale (TSIS) utilises experts' implicit understanding of Social Intelligence to uncover a three factor conceptualisation of Social Intelligence (SI). The TSIS suggests that Social Intelligence has three distinct components: (1) Social information processing, or *ability to understand and predict other peoples' behaviours and feelings* (2) social skills, or *the behavioural aspects or the ability to enter and adapt to new social situations* (3) social awareness, or *the tendency to be aware of events in social situations*. The TSIS has been gaining popularity among researchers over the years across the world. However, researchers advise against examining Social Intelligence without accounting for cultural factors that impact social behaviour (Goswami, 2019); and recommend validating self report instruments for the specific population that is being tested. The present study validates TSIS for use among Indian respondents.

3. Methodology

3.1 Study 1 : Factor Structure and Internal Consistency

The aim of this research was to examine the factor structure and validity of the TSIS (Silvera et al., 2001) in the Indian context.

3.1.1 Participants and Procedure

A total of 250 questionnaires were circulated among Indian professionals engaged in varied work profiles (Marketing, Information Technology Management, Chartered Accountancy etc.) at selected organizations operating in India. A total of 207 questionnaires were complete in all respects. Only the fully completed questionnaires were analyzed for the study ($n=207$, Men = 113, Women = 94). For all participants, informed consent was obtained.

3.1.2 Materials

The English translation of the TSIS (Silvera et al., 2000) available in the original paper (Silvera et al.,

2001) was used. TSIS consists of 21 items. Each item of this scale is a statement such as "I can predict other people's behaviour". Respondents were asked to indicate how true each statement was for them on a 5 point Likert Scale (from 0 = "Not true at all" to 4 = "Very True") instead of a seven point scale used in the original questionnaire to enhance ease of use (Revilla, Saris, & Krosnick, 2014). Eleven items were reverse coded in the original scale, which were retained as is during the study.

3.1.3 Results and Discussion (Study 1)

Table 1 presents the means, standard deviations, internal consistency (alphas), and correlations of the three dimensions of TSIS.

Table 1: Means, Standard Deviations, Internal Consistency and Correlations of the three dimensions of TSIS

	Mean	Std. Dev.	(SIP)	(SS)	(SA)	Chronbach Alpha
Social Information Processing (SIP)	3.69	.67	1.000	.347**	.252**	.815
Social Awareness (SA)	3.37	.81	.252**	.053	1.000	.752
Social Skills (SS)	3.60	.79	.347	1.000	.452	.784
Overall Reliability of scale : .903 ** Correlation is significant at the 0.01 level (2-tailed).						

The Confirmatory Factor Analysis (CFA) was used to determine whether the three -factor solution fitted the data in line with the theory. The analysis was performed using AMOS 21.

Only ten out of the twenty one items were found to have significant loadings as shown in Table 2

Table 2: Items -wise factor loadings of TSIS

Items	Factor	Regressions Weights
I understand others' wishes	Social Information Processing	.536**
I can often understand what others are trying to accomplish without the need for them to say anything	Social Information Processing	.441**
I can often understand what others really mean through their expression, body language, etc	Social Information Processing	.477**
I can predict how others will react to my behaviour	Social Information Processing	.692**

I am often surprised by others' reactions to what I do#	Social Awareness	.492**
Other people become angry with me without me being able to explain why#	Social Awareness	.450**
It seems as though people are often angry or irritated with me when I say what I think#	Social Awareness	.728**
I am good at entering new situations and meeting people for the first time	Social Skills	.653**
I am good at getting on good terms with new people	Social Skills	.760**
I fit in easily in social situations	Social Skills	.459**
# 5,6,7 were Reverse Coded		

The original TSIS consisted of 21 items ; seven each for all the three factors. However, in our version, Social Information Processing is measured by four items (Item 1,2,3,4) while Social Awareness (Item 5,6,7) and Social Skills (Item 8,9,10) are measured by three items each and items with a loading of less than .40 were dropped. Our results vary from Goswami (2019) who reported a four factor structure of TSIS in a study of a 100 Indian respondents; although they are in line with three factor structure confirmed by other authors among Italian (Gini & Iotti, 2004), Turkish (

Doğan & Çetin, 2009), English (Grieve & Mahr, 2013) and Czech (Makovská & Kentos, 2006) respondents.

The validity of the three factor model was examined with different indices: Comparative Fit Index (CFI), Goodness of Fit Index (GFI) and Root Mean Square of Error Approximation (RMSEA). The fit indices were evaluated using values given by Hu and Bentler (1999). The values as given in Table 3, were found in acceptable ranges.

Table 3: Model Fit Evaluation : TSIS

Index	CMIN/DF	CFI	GFI	RMSEA
Default Model	1.752	.917	.950	.061
Acceptable Values	1-5	>.9	> .90	<.08

The results confirmed the three-factor structure of the TSIS validated for the Indian population. All three dimensions (Social Information Processing; Social Skills; Social Awareness) had adequate internal consistency (Table 1) suggesting that the three factors capture separate dimensions of Social Intelligence.

3.2 Study 2: Convergent Validity of the TSIS (shortened version) adapted through Study 1

In this study, the convergent validity of the TSIS (Shortened Version) finalised in Study 1 was examined by correlating TSIS with other constructs that have been frequently linked to Social Intelligence.

Social Intelligence has most prominently been conceptually linked to Emotional Intelligence; Mayer & Salovey (1990) first described Emotional Intelligence as a form of Social Intelligence that involves the ability to be aware of and manage emotions in self and others. Eventually, Emotional Intelligence and Social Intelligence began to be

examined together under the umbrella term of Emotional - Social Competencies; while researchers' approach towards the two constructs diverged. Over time, certain researchers came to regard Emotional Intelligence as a subset of Social Intelligence (Crowne, 2009); while others believed the various sub-dimensions of Emotional Intelligence to be in effect facets of Social Intelligence (for a detailed discussion, see Rodman, 2016a). Both approaches, however, describe two dimensions (i.e. Awareness of others; Management of others) of the Mayer and Salovey's four factor ability model of Emotional Intelligence as expressions of Social Intelligence; and these dimensions have been studied as such among Salespersons (Wisker & Poulis, 2014); laboratory assistants (Law, Wong, Huang, & Li, 2008) and civil servants (Wong & Law, 2002). Hence, to study the convergent validity of TSIS, we correlated TSIS scores with respondent scores on WEIP-S (Jordan & Lawrence, 2009), a popular measure of Emotional Intelligence.

3.2. 1Participants and Procedure

Responses gathered from 299 executives were analysed ($n=299$, Men = 196, Women = 103, Mean age = 35.6 years). We expected TSIS to be correlated with Awareness of others ; Management of others subscales of WEIP-S.

3.2.2 Materials

WEIP-S (Jordan & Lawrence, 2009) is questionnaire specifically designed to measure Emotional Intelligence in organizational settings; WEIP-S measures respondents' Awareness of Self; Awareness of Others'; Management of Self; Management of others, in line with Mayer &

Salovey (1990) conceptualisation of Emotional Intelligence. Participants were asked to respond to items on WEIP-S and TSIS (Shortened version) . Mean scores were calculated for each subscale (Awareness of Self; Awareness of Others'; Management of Self; Management of others.); and were examined with the respective respondents' scores on TSIS. Table 4 presents the correlations between the WEIP-S total score, the TSIS total score and scores for each subscale. Scores of the four subscales of WEIP-s were also positively correlated with the sub dimensions of TSIS as shown in Table 4.

Table 4: Correlations between TSIS and WEIP-S scales

	Awareness (Self)	Management (Self)	Awareness (Other)	Management (Other)	WEIP-s (Total)
Social Skills	.614**	.643**	.680**	.714**	
Social Awareness	.530**	.437**	.532**	.539**	
Social Information Processing	.626**	.746**	.728**	.670**	
TSIS (Total)					.834**

3.2.3 Results and Discussion (Study 2)

As expected, the results show that the total score of the WEIP-S was positively correlated with the total score of the TSIS ($r = .83$, $p < .001$). The results of Study 2 show that Social Intelligence sub scales are positively correlated with all subscales of Emotional Intelligence; however the relationship is comparatively stronger between the Social Intelligence subscales and the *other focused* subscales of Emotional Intelligence i.e. with Awareness of Others and Management of Others thereby providing convergent validity for the TSIS (shortened) version developed in Study 1. The high correlations between the overall scores of WEIP-S and TSIS reinforces the conceptualisation of Emotional and Social Intelligence as inter-related and possibly overlapping constructs. The differential role these two constructs play at the workplace should be examined closely in future research.

3.3 Study 3: Relationship with Employee Performance

The aim of the study was to examine the relationship between dimensions of Social Intelligence and workplace performance of Indian executives. Social Intelligence has rarely been linked to measures of Employee Performance but is highly recommended (Michinov& Michinov, 2020). To this end, we examined TSIS scores in relation to supervisory evaluation of respondents'

performance at the workplace.

3.3.1 Participants and Procedure

Working Indian executives were invited to participate in research, and were asked to fill in either a paper - pen or e- version of the TSIS (shortened version) finalised in Study 1. For executives who participated in the study, an appraisal of their performance was sought from their immediate supervisors. Informed consent was obtained from all participants

Executive responses and their respective appraisals were finally collected for 317 respondents. Only those respondents whose performance evaluations could be gathered were finally included in the study.

The final sample comprised 317 participants, with 196 men and 121 women who were engaged in varying profiles namely Advertising (45,14%), Data Management (73, 23%), Sales (101, 32%), IT and IT Services (98,31%). Mean age was 31.20 years ($SD = 7.08$), ranging from 23 to 57 years.

3.3.2 Materials

The questionnaire consisted of a demographic section (Age, Gender, Work Profile, Supervisor Name and Supervisor Contact Information) and the ten items of the TSIS (shortened version) validated in Study 1.

For each executive who participated in the survey, performance evaluation was sought from the

immediate supervisor. The supervisors were asked to rate the respondents on the 13 parameters of the Performance Evaluation Schedule¹ (PES, Lather & Jain, Unpublished) given in Appendix -1. The PES asks the supervisor to rate each employee on a Likert Scale ranging from 5 (Very High) to 1 (Very Low) on different parameters of employee performance. The total of the scores obtained on the 13 parameters was used as Performance Score for the individual. For this study, the internal consistency of PES was satisfactory as a whole (.77) ; and for each component (Cognitive: .68; Social: .79; and Personal: .71)

3.3.3 Results and Discussion (Study 3)

Table 5 shows the means, standard deviations of the variables measured. Table 6 presents the correlations between the totals as well as between three dimensions of TSIS and the three dimensions of PES.

Table 5: Means and Standard deviations of TSIS scores; PES Scores and their subscales

	Mean	Std. Deviation
Social Skills	2.77	.88
Social Awareness	2.35	.99
Social Information Processing	2.78	.80
Employee Performance (Cognitive)	3.69	.91
Employee Performance (Social)	3.29	1.07
Employee Performance (Personal)	3.64	1.10
PES_Score	3.46	.96
TSIS Score	2.65	.75

Table 6: Correlations between overall and subscales' scores of TSIS and PES

	Employee Performance (Cognitive)	Employee Performance (Social)	Employee Performance (Personal)	Employee Performance (PES_Total)
Social Skills	.080	.243**	.149**	
Social Awareness	.034	.206**	.092	
Social Information Processing	.144*	.315**	.230**	
Social Intelligence (TSIS_Total)				.245**
**. Correlation is significant at the 0.01 level (2-tailed). *. Correlation is significant at the 0.05 level (2-tailed).				

¹ PES : Performance Evaluation Schedule : parameters: 'Productivity', 'Error Less Delivery', 'Timely delivery' and 'Knowledge base' (clubbed under Cognitive Dimension) ; 'Discipline' and 'Punctuality' (Personal dimension); and 'Leadership', 'Innovation', 'Initiative', Crisis Handling', 'Being a team player' and 'Going beyond assigned job' and 'Ready to do attitude' under (Social dimension)

The results of the study show that employee performance is correlated with individual Social Intelligence. The results indicate that all dimensions of Social Intelligence affect Employee Performance, with all the three factors (Social Skills, Social Awareness and Social Information Processing) being related to both interpersonal performance and behavioural performance; while neither of these dimensions affecting cognitive performance (Social Information Processing is weakly correlated to the cognitive dimension of Employee Performance only at .05 sig. level). Our results show that Social Intelligence is indeed positively related to Employee Performance, apparently because it impacts aspects of an individual's interpersonal and behavioural performance.

3.4 Study 4: Testing the Predictive Validity of TSIS (Shortened Version) at the workplace

The aim of the study was to examine how high, medium and low performing employees might differ with regard to Social Intelligence. Based on the results of the Study 3 above, we expected that high performers will possess higher Social Intelligence.

3.4.1 Participants and Procedure

To test the predictive validity of the TSIS with a sample of workers, we conducted a study among Indian executives (n = 482, Men = 312, Women = 170) engaged in diverse profiles (Advertising: 63, 13%; Client Services: 91, 19%; Customer Service: 81, 17%; ITeS: 150, 31%; Data Management: 19,

4%; Finance and Accounting : 78, 16%) across organizations.

3.4.2 Materials and Methods

As in Study 3, working Indian executives were invited to participate in research, and were asked to fill in either a paper - pen or e- version of the TSIS (shortened version) finalised in Study 1. For executives who participated in the study, a appraisal of their performance was sought from their immediate supervisors. Informed consent was obtained from all participants. The final sample collected had 482 (n = 482; men = 265; women = 217; Mean Age : 31.3 years) respondents' and their respective superiors' evaluation of their performance on the PES (Lather & Jain, Unpublished) described above.

3.4.3 Results & Discussion (Study 4)

To investigate impact of Social Intelligence on Employee Performance, we divided respondents into three categories : High, Medium and Low performers based on their total scores on the PES. The average score of the respondents was found to be 48 with a standard deviation of 9.50. Thus, the respondents were divided in to three groups on the basis of + 1 standard deviation from the mean. The first group consisted of 101 respondents with PES scores in the range 46 to 65 (High Performers); the second group consisted of 254 respondents with PES scores in the range 27 to 45 (Medium Performers); and the third group consisted of 127 respondents with PES scores in the range 13 to 26 (Low Performers). Table 7 shows the Mean, SD and Min-Max scores of all the three groups.

Table 7 : Mean and Std. Deviations of Social Intelligence Scores for High, Medium and Low Performers

	Mean	Std. Deviation	Minimum	Maximum
Low Performers	18.73	2.150	13.00	22.00
Average Performers	26.72	3.58	18.00	37.00
High Performers	28.25	2.92	21.00	36.00

In order to test if significant differences existed with regard to Social Intelligence among the three groups, one way ANOVA and post hoc tests were conducted. Results indicated that Social Intelligence varies significantly among different

categories of Employees (F= 348.14; p<.001). Higher performers have significantly higher Social Intelligence scores than Low and Medium performers as seen in Table 8.

Table 8: Post hoc : Difference in TSIS among high, medium and low performers

Employee Performance Category	1	2	3
Low Performers	18.73 _a		
Average Performers		26.72 _b	
High Performers			28.26 _b
<i>Note: Means with differing subscripts within rows are significantly different at the $p < .05$ based on Duncan Multiple Range post hoc paired comparisons.</i>			

Overall, the results of this study confirm the predictive validity of the TSIS (Shortened) by demonstrating that employees with high social intelligence obtained better scores for their workplace performance when rated by their supervisors. Although, the study does not take into account organizational factors impacting employee performance evaluations, the presence of a large and diverse sample lends credence to the results obtained.

4. GENERAL DISCUSSION

The first objective of the present research was to validate the psychometric properties of the Tromso Social Intelligence Scale (TSIS) in samples of Indian executives engaged in various sectors of the economy. The second objective was to examine the validity of the TSIS by demonstrating its influence on employee performance. Four separate studies were conducted to meet the above objectives. In Study 1, the three factor structure of Social Intelligence proposed by Silvera et al.(2001) was confirmed. It was demonstrated that only ten items of TSIS are sufficient to measure Social Intelligence, and that the TSIS (shortened version) has sound psychometric properties. Study 2 provided evidence about convergent validity of TSIS when comparing Social Intelligence scores with Emotional intelligence scores on the WEIP-S. The results indicated that the 'other' focused dimensions of Emotional Intelligence are strongly linked with Social Intelligence. Further, we examined whether Social Intelligence bears a significant relationship with employee performance in actual organizational settings in Study 3 and Study 4. Our results indicated that Social Intelligence is strongly linked to performance at the workplace, especially to the non cognitive aspects (social and personal) of performance. The results also provided evidence that high performers have higher social intelligence such that there are significant differences in TSIS scores of High and Low performers.

The current work contributes significantly to advancing theory and research regarding Social Intelligence in the Indian context. It puts forth a

shortened, easy to use self-report instrument for measuring Social Intelligence in the workplace validated for use among Indian executives. Further, it clarifies that although Social Intelligence and Emotional Intelligence are conceptually linked to each other, Social Intelligence is linked more strongly to Awareness and Management of others' emotions rather than to Awareness and Management of one's own emotions. A comparison between Emotional Intelligence and Social Intelligence had not been made using two instruments specifically validated on Indian working professionals prior to this study so far as is known. Most importantly, the current work is the among the first to link Social Intelligence directly to performance at the workplace. In study 3, Supervisor ratings of a large number of working professionals were correlated with these professionals' Social Intelligence scores, and it was seen that an increase in Social Intelligence impacts employee performance positively. The study (Study 3) was also able to clarify that among the three dimensions of workplace performance (cognitive, social and personal), Social intelligence is understandably linked to all aspects of performance other than cognitive aspects. The evidence for the impact of Social Intelligence on workplace performance was further cemented by the results of Study 4 which suggested that High Performing individuals differ significantly from Low performing individuals with regard to their Social Intelligence.

The loadings of the individual items as well as overall reliability indices of the present version of TSIS are robust; giving us reason to believe that the scale presents a comprehensive picture of the construct in the workplace. Further, a smaller item pool only goes on to increase the utility of the instrument in large scale surveys. Additional evidence regarding its convergent and external validity provided in the current work further eases the adoption of Social Intelligence in managerial research.

5. Limitations and Recommendations for Future Research

The present study puts forth a useful, reliable and efficient measure of Social Intelligence. However, certain limitations need to be acknowledged, and be addressed in future research. The study does not examine the stability of the TSIS (shortened) over time; hence a test-retest study is recommended. Also, the TSIS should be examined in relation to other self-report measures of Social Intelligence to highlight its specific strengths and weaknesses as a psychometric instrument. Future research can also examine the role of Social Intelligence in team performance aside from individual employee performance. And finally, a deeper investigation of the construct of Social Intelligence may be undertaken to understand the implications of the strong correlations seen among the three dimensions of the TSIS.

6. CONCLUSION

The importance of Social Intelligence in the workplace has long been hypothesized. However, empirical evidence regarding its impact can only be gathered through expedient self-report instruments that can be effectively used in managerial research. The paper contributes in this regard by validating the popular TSIS inventory for the Indian population. Social Intelligence cannot be assumed to be independent of cultural context, hence validating Social Intelligence in specific cultural and national contexts, as has been done in the current study, is important. Additionally, since our work links Social Intelligence empirically to an objective measure of workplace performance, it unambiguously supports the use of TSIS in managerial research. The current results support the validity of the TSIS among professionals engaged in a variety of activities, and specifically demonstrate the influence of Social Intelligence on Employee Performance.

From a practical perspective, the present results provide support for a useful tool that can be used in personnel selection. The relationship between Social Intelligence measures and actual employee performance had scarcely been investigated thus far, and the present study is a step in this direction. Results of the current work suggest that TSIS can be reliably used in recruitment, selection and assessment to measure Social Intelligence, a construct which bears a significant positive relationship with Employee Performance.

REFERENCES

Albrecht, K. (2006). *Social intelligence: The new science of success*. John Wiley & Sons.

Bass, B. M. (1990). From transactional to transformational leadership: Learning to

share the vision. *Organizational dynamics*, 18(3), 19-31

- Birknerova, Z. (2011). Social and emotional intelligence in school environment. *Asian Social Science*, 7(10), 241-248.
- Björkqvist, K., Österman, K., & Aggression? = empathy - Kaukiainen, A. (2000). Social intelligence Aggression and Violent Behavior, 5(2), 191-200
- Boyatzis R. E., Good D., Massa R. (2012). Emotional, social and cognitive intelligence as predictors of sales leadership performance. *J. Leadersh. Organ. Stud.* 19, 191-201.
- Boyatzis, R. E. (2009). Competencies as a behavioral approach to emotional intelligence. *Journal of Management Development*, 28(9), 749-770.
- Chapin, F. S. (1942). Preliminary standardization of a social insight scale. *American Sociological Review*, 7(2), 214-225.
- Conzelmann, K., Weis, S., & Süß, H. M. (2013). New Findings About Social Intelligence: Development and Application of the Magdeburg Test of Social Intelligence (MTSI). *Journal of individual differences*, 34(3), 119-137.
- Crowne, K. A. (2009). The relationships among social intelligence, emotional intelligence and cultural intelligence. *Organization Management Journal*, 6(3), 148-163.
- Doğan, T., & Çetin, B. (2009). The Validity, Reliability and Factorial Structure of the Turkish Version of the Tromsø Social Intelligence Scale.
- Ford, M. E., & Tisak, M. S. (1983). A further search for social intelligence. *Journal of Educational Psychology*, 75(2), 196
- Gini, G., & Iotti, G. (2004). La Tromsø Social Intelligence Scale: traduzione e adattamento alla popolazione italiana. *University of Padova, Italy*.
- Goleman, D., & Boyatzis, R. (2008). Social intelligence and the biology of leadership. *Harvard business review*, 86(9), 74-81.
- Goswami, M. (2019, September). Assessing the Factor Structure of Tromsø Social Intelligence Scale in Indian Cultural Context. In *Proceedings of International Conference on Advancements in Computing & Management (ICACM)*.

- Grieve, R., & Mahar, D. (2013). Can social intelligence be measured? Psychometric properties of the Tromsø Social Intelligence Scale–English version. *The Irish Journal of Psychology*, 34(1), 1-12.
- Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural equation modeling: a multidisciplinary journal*, 6(1), 1-55.
- Hunt, T. (1928). The measurement of social intelligence. *Journal of Applied Psychology*, 12(3), 317.
- Jurková, J., & Ferencová, V. (2010). The opportunities for increasing the marketing communication efficiency on the university education market. *Management*, 435-443.
- Kihlstrom, J. F., & Cantor, N. (2000). Social intelligence.
- Kobe, L.M., Reiter-Palmon, R. & Rickers, J.D. (2001) Self-reported leadership experiences in relation to inventoried social and emotional intelligence. *Curr Psychol* 20, 154–163
- Lather, A.S, Jain, S. Performance Evaluation Schedule (Unpublished)
- Law, K. S., Wong, C. S., Huang, G. H., & Li, X. (2008). The effects of emotional intelligence on job performance and life satisfaction for the research and development scientists in China. *Asia Pacific Journal of Management*, 25(1), 51-69.
- Lathesh, K. R., & Avadhani, V. D. (2018). A Study on Social Intelligence and its Impact on Employee Performance of Insurance Sectors in Mysuru City. *International Journal of Mechanical Engineering and Technology*, 9(1), 530-537.
- Makovská, Z., & Kentos, M. (2006). Correlates of social and abstract intelligence. *Studia psychologica*, 48(3), 259.
- Marlowe, H. A. (1986). Social intelligence: Evidence for multidimensionality and construct independence. *Journal of educational psychology*, 78(1), 52.
- Marlowe, H. A. (1986). Social intelligence: Evidence for multidimensionality and construct independence. *Journal Of Educational Psychology*, 78(1), 52.
- Michinov, E., & Michinov, N. (2020). When emotional intelligence predicts team performance: Further validation of the short version of the Workgroup Emotional Intelligence Profile. *Current Psychology*, 1-14.
- Moghaddam, R., Ghadiri, A., & Kermani, S. (2013). The Relationship between Social Intelligence of Managers & Performance of Brokerage Firms: Evidence from Tehran Stock Exchange. *Interdisciplinary Journal of Contemporary Research in Business*, 5(3), 681-687
- Nazarpoori, A. (2017). A survey of the effect of leader's social intelligence on employee's perception of interpersonal justice: the mediating role of shared leadership. *International Journal of Leadership in Education*, 20(5), 618-631.
- Pfeffer, J., & Salancik, G. R. (2003). The external control of organizations: A resource dependence perspective. Stanford University Press.
- Revilla, M. A., Saris, W. E., & Krosnick, J. A. (2014). Choosing the number of categories in agree–disagree scales. *Sociological Methods & Research*, 43(1), 73-97.
- Riggio, R. E., & Reichard, R. J. (2008). The emotional and social intelligences of effective leadership: An emotional and social skill approach. *Journal of managerial psychology*, 23(2), 169-185.
- Rodman, J (2016)a *Social intelligence and emotional intelligence: a literature review of their similarities and differences*. [White Paper]. Fort Leavenworth, KS: Mission Command - Capabilities Development and Integration Directorate (CDID). <https://cgsc.contentdm.oclc.org/digital/collection/p16040coll2/id/6/>
- Rodman, J (2016)b *Social intelligence: assessment and training* [White Paper]. Fort Leavenworth, KS: Mission Command - Capabilities Development and Integration Directorate (CDID). <https://cgsc.contentdm.oclc.org/digital/collection/p16040coll2/id/22/>
- Shojaeyan, A. (2016). The effect of social intelligence on teamwork in Hamedan"s Ekbatan Hospital. *Management*, 3(5), 34-40.

- Silvera, D., Martinussen, M., & Dahl, T. I. (2000). Preliminary Validation of a self-report measure of social intelligence. Annual Meeting of Midwestern Psychological Association, Chicago. IL.
- Silvera, D., Martinussen, M., & Dahl, T. I. (2001). The Tromsø Social Intelligence Scale, a self-report measure of social intelligence. *Scandinavian journal of psychology*, 42(4), 313-319.
- Thorndike, E. L. (1920). Intelligence examinations for college entrance. *The Journal of Educational Research*, 1(5), 329-337.
- Vernon, P. E. (1933). Some characteristics of the good judge of personality. *Journal of Social Psychology*, 4, 42-57.
- Wisker, Z. L., & Poulis, A. (2014). Emotional intelligence–sales performance relationship: A mediating role of adaptive selling behaviour. *International Journal of Management and Economics*, 43(1), 32-52.
- Wong, C. S., & Law, K. S. (2002). The effects of leader and follower emotional intelligence on performance and attitude: An exploratory study. *The leadership quarterly*, 13(3), 243-274.
- Zaccaro, S. J., Foti, R. J., & Kenny, D. A. (1991). Self-monitoring and trait-based variance in leadership: An investigation of leader flexibility across multiple group situations. *Journal of applied psychology*, 76(2), 308