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Skill Gaps as a Stumbling Block to Economic Development: A Study of Trilateral Perspective

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Abstract:

To explore one of the constraints to economic development, this study aims to identify skill gaps in management students on the basis of various employability skills. This paper also seeks to examine the difference in perception of student, faculty and HR professionals regarding employability skills. Having cross-sectional research design, this study focuses on trilateral perspective of three respondent groups on seven employability skills using a self-administered questionnaire with 34 items. Reliability and validity of the proposed scale was established with cronbach's alpha, convergent and discriminant validity. Descriptive and inferential statistics was used to analyze the data through Kruskal-Wallis test and DSCF (multi group analysis). The finding of this research shows a considerable difference in the perception of student, faculty and HR respondents. The study provides practical utility to student, faculty, HR recruiters, policy makers and career counselors. This is a comprehensive study having triangular approach with established psychometric properties of scale and multi group analysis for skill gap measurement.

Keywords: Skill gaps, Employability, Kruskal-Wallis test, Multi group analysis, Skill importance and Skill competence.

Introduction:

Human capital of a nation is the base of its economic development and growth.As alarmed by the then president-Mr. Pranab Mukherjee, 'The Indian economy today needs to generate 115 million non-farm jobs over the next decade to gainfully employ its workforce and reap its demographic dividend'. This situation is called 'Great Indian Talent Conundrum' leading to 'Demographic disaster' instead of 'Reaping Demographic Dividend'(Venkatraman, 2017). Stating the early intervention of Harbinson (1973), Rastogi and Gaikwad (2017)in their study mentioned that 'Human resources constitute the ultimate basis for the wealth of nations. Capital and natural resources are passive factors of production; human beings are the active agents who accumulate capital, exploit natural resources, build social, economic, and political organizations, and carry forward national development. Clearly a country which is unable to develop the skills and knowledge of its people and to utilize them effectively in the national economy will be unable to develop anything else'. Contribution of Indian millennial in economic development is significant. Post liberalization, Indian economy was barraged with

many opportunities (Sachdeva and Sivakumar 2017). But, whether the youth is able to utilize these opportunities is still a question. Vision of making India a global economic powerhouse by 2025, requires adoption of 4.0 technologies by Indian youth (Skill India Report, 2020).To aid this vision, government has launched various skill development schemes to accelerate economic growth. One of such initiative is 'Rural BPO' launched under 'Digital India program', with an aim to engage rural people in technology enabled jobs such as data entry, processing, conversion and call centre services (Mehta, 2020).

Employability is matter of concern for students, universities, government and economy at large (Poon, 2014). This is due to employer's expectation of graduates to be equipped with necessary skills to perform a job with minimum supervision (Andrew and Higson, 2008). It reflects weakness on the part of graduates to contribute in economic development and nation building (Razi and Naqvi, 2011).Employer emphasizes more on an individual's personal attribute and soft skills in comparison to his/her degree (McMurray et al., 2016) and technical/subject knowledge (Finch et al., 2013; Saeed, 2015), because they are concerned about what an individual can do rather then what he/she knows (Jackson, 2010).Recent study by Mehta& Awasthi (2019) pointed out the emergence of skill based industry 4.0 technologies. According to Ayoubi et al., (2017), the responsibility of developing and enhancing employability in graduates lies with higher educational institutes. But, mostly higher education institutes are unaware of the employer's demand (Boden and Nedeva, 2010), and consequentially graduates are forced to accept inferior jobs so as to enter the job market (McKeown and Lindorff, 2011).

Having 600 million people under the age of 25, India ought to gain the advantage of demographic dividend. India accounts for total 3036 management institutions, with a total intake of 371850 students with placement record data of only 115387 students on the official website of AICTE. According to Skill India report (2020), 54% of MBA students are found to be employable, which is the biggest among various academic disciplines. Motivation of this study emerges from the huge difference in the number of student intake and student placed, as per thedata derived from the website of AICTE. This study aims to identify the skill gaps in management students from student, faculty and manager's perspective by assessing the gap between importance level and competence level of skills in graduates.

Various facts claiming the modernity of this paper are as follows:

The present study includes seven important employability skills derived from extensive literature review. This study aims to fill the research gap by proposing a more comprehensive and complete model to assess skill gaps in students in Indian context. Moreover, the present study aims to conduct scale reliability (cronbach's alpha) and validity (convergent and discriminant) as well, which confirms the appropriateness of the scale to measure skill gaps in students. To our knowledge, we could find only one study which elucidates scale reliability using cronbach's alpha but scale validity was not established (Kenayathulla et al., 2019). This study is trilateral approach covering responses from all the three relevant parties such as student, faculty and HR.

This paper is comprised of seven sections, starting with introduction, followed by literature review, research methodology and data analysis. Further, discussions and conclusion is followed by practical implications, future lines for research and limitations.

Literature Review:

Previously, competencies and professional skills were considered as a by-product of education process but now they are considered as an important part of a degree (Coll et al., 2002). The responsibility of developing employability skills in students lies with students, faculties, placement officers, industry professionals and higher educationalists (Abbasi et al., 2018; Rao, 2014). Existing literature pertaining to employability skills shows a gap between expected and possessed skills in students of varying fields such as accounting (Lim et al., 2016), computer science (Wickramasinghe and Parera, 2010), engineering (Ramadi et al., 2016), management (Wilton, 2008), marketing (Dacko, 2006), nursing (Reem et al., 2014), pharmaceutical (Nayak and Yadav, 2016), real estate (Poon, 2014).

Employability skills:

Having no consensus on the definition of employability skill (Tymon, 2013), various researchers have defined employability as per their own analysis. According to Gibbs (2000), employability skills refer to an individual's attributes, competencies and technical knowledge which he/she uses for practical decision making at workplace. Overtoom (2000), havedefined basic employability skills as core transferable competencies representing essential functioning and knowledge skills required for successful performance at each level of employment. Rosenbaum and Person (2003), has confirmed employer's need of basic employability skills from students rather than academic skills. Plastrik et al., (2003), alarmed higher educationalist regarding the gap between skills required by industry and skillsacquired by students. McMasters (2005) also pointed university's ignorance of industry demands. Based on the work of Abbasi et al., (2018) and Rosenberg et al., (2011), the following skills are investigated in the current study:

Basic Literacy and Numeracy skills refer to the ability of an individual to listen, read, speak, write and perform the basic computational skills (SCANS, 1991). Reading includes interpretation of written information; writing includes communication of thoughts in the form of letters; and computational skills include solving practical problems with the help of mathematical techniques (Rosenberg et al., 2012). Numeracy skills refer to ability of an individual to work with numbers and having basic mathematical knowledge to solve practical business problems (Durrani and Tariq, 2012). Recruiters consider basic literacy and numeracy skill as an important skill to assess the employability of graduates (Rosenberg et al., 2012).

Critical thinking skills refer to the ability of an individual to creatively solve problems and make decision in complex business situation (SCANS, 1991). Critchley (2011)has defined critical thinking skills as employability skills associated with evolving thinking leading to quality of life. Finch et al., (2013), described critical thinking as one of the desired employability skills. Harris and King (2015) and Jackson (2013), in their study elaborated

business graduate's perception of critical thinking as a relatively important skill to gain and maintain employment. Amen (2014), urged business schools to develop critical thinking skills in graduates.

Information technology skills refer to the ability of an individual to select technical equipment, procedures and tools togather and evaluate data (SCANS, 1991). As per Rosenberg et al., (2012), IT skills are required for efficient work presentation, data gathering and data processing. In the view of Jackson and Chapman (2012), business graduates are found to be efficient in information management.

Innovation skills refer to an individual's ability to take initiative and think creatively to generate ideas to find new ways to upgrade organizational performance (Singh et al., 2016). Shikari (2011) highlightsfailure of higher education in inculcating innovation in management graduates.Chang (2014) stipulated exigency of innovation to develop sustainable employment in undergraduates.

Interpersonal skills refer to the ability of an individual to perform in teams by helping others to learn, negotiating agreements, resolving differences and working in multicultural organization (SCANS, 1991). As stated by Harris and King (2015), interpersonal skills are one of the most important skills for being employable. On the contrary, McQuade and Maguire (2005), has confirmed the dissatisfaction of employers with reference to interpersonal skills.On the other hand, Finch et al., (2013) and Dacko (2006) defined interpersonal skills as the most desired skills to enhance employability in marketing graduates. Interpersonal skills are suggested to be a prime factor facilitating entrepreneurial skills in students (Nandonde and Malaki, 2020).

Leadership skills refer to the ability of an individual to fulfill organizational goals by motivating others (Schermerhorn, 2008). Aligning leadership with achievement of strategic vision, Keeton (2018), defined leadership as an influencing process based on trust and respect. In the view of Bhanugopan and Fish (2009), Rosenberg et al., (2012) and Yang et al., (2014), leadership skills are one of the most important skills for attaining employment and superior performance at work. Recruiters emphasize on leadership skills while screening and interviewing fresh graduates (Conrad and Newberry, 2012; Finch et al., 2013). Marketing students lack the desired level of leadership skills (Dacko, 2006; Jackson and Chapman, 2012; Rosenberg et al., 2012).

Problem solving skills refer to the ability of an individual to sort out business related critical issues. As per Wismath et al., (2015), efficient problem solving requires skills, abilities and cognitive approaches which can change the way an individual looks at the world. Problem solving has been recognized as a critical component of employability and future performance of graduates from different disciplines (Abassi et al., 2018;Harris and King, 2015; Jackson, 2013; Finch et al, 2018). According to Jackson and Chapman (2012), employers and academicians are satisfied with the proficiency level of business graduates in problem solving.

Research Methodology:

The study was conducted using descriptive research design approach. Population of this study comprises of management students, faculties and HR managers in Delhi/NCR location. Stratified sampling technique was used to select 23 AICTE approved management colleges with NBA affiliation in Delhi/NCR. Further, from top five colleges, management students and faculties were approached. HR professional data was selected from college websites.Data was collected through self-administered questionnaire. Seven employability skills were listed in the questionnaire. Participants were requested to indicate importance level of each skill on a seven point likert scale ranging from 1 for 'not at all important' to 7 for 'extremely important'. Likewise, participants were requested to indicate competence level of students on each skill on seven point likert scale ranging from 1for 'extremely weak competence' to 7 for 'extremely strong competence'. Similar questionnaires were used by Abbasi et al., (2018) and Ramadi et al., (2016) for collecting simultaneous responses for importance and possession of skills.

Respondents: Participants consisted of management students, faculties and recruiters of the selected management colleges.Total 800 questionnaires were distributed to 450 students, 200 faculties and 150 recruiters. Out of which 380 questionnaires were returned. Due to incomplete and inappropriate data, 45 questionnaires were discarded resulting in final data set of 335 sample size with a response rate of 41%. Data include responses from 176 students, 95 faculties and 64 HR professionals.

Instrument used:Sample of items from each variable is as follows:

Variable (no. of items)	**Sample Item**
Basic literacy and numeracy skills (4)	The students can perform basic computations and approach practical problems with different mathematical techniques.
Critical thinking skills (6)	The students can recognize problems and devise and implement a plan of action.
Information technology skills (5)	The students can choose procedures, tools or equipment including computers and related technology
Innovation skills (4)	The students try to work creatively rather than old boring ways
Interpersonal skills (5)	The students contribute to group efforts
Leadership skills (5)	The students can set personal goals, monitor progress, exhibit self-control and take responsibility for my actions.
Problem solving skills (5)	The students can identify essential components to solve a problem

Data Analysis:

Results were drawn from descriptive statistics, Kruskal-Wallis test and DSCF multi group analysis. Moreover, cronbach's alpha was used to test reliability of the scale. Moreover, validity was confirmed using content validity, convergent validity and discriminant validity.

Preliminary analysis:

The results of mean and standard deviation of importance of skills are shown in Table 1.1.According to student group analysis,information technology skill was scored highest with a mean score of 4.4 andleadership skill wasscored lowest with a mean score of 3.29. According to faculty group analysis, information technology skill was scored highest with a mean score of 4.63 and basic literacy and numeracy skill was scored lowest with a mean score of 3.57. According to HR group analysis, problem solving skill was scored highest with a mean score of 4.4 and basic literacy and numeracy skill was scored lowest with a mean score of 3.87.

Table 1.1
Descriptive statistics of respondent groups: Importance

Skill	Respondent group	N	Mean	SD
Basic literacy & numeracy skill	Student	176	3.31	1.14
	Faculty	95	3.57	982
	HR	64	3.87	1.06
Critical thinking skill	Student	176	3.77	0.998
	Faculty	95	4.28	1.04
	HR	64	4.14	0.878
Information technology skill	Student	176	4.4	1.08
	Faculty	95	4.63	1.09
	HR	64	4.28	1.01
Innovation skill	Student	176	4.11	1.1
	Faculty	95	4.28	1.1
	HR	64	4.43	0.96
Interpersonal skill	Student	176	3.62	1.15
	Faculty	95	4.21	1.23
	HR	64	4.15	1.01
Leadership skill	Student	176	3.29	0.924
	Faculty	95	3.68	1.21
	HR	64	3.83	1.22
Problem solving skill	Student	176	3.48	1.11
	Faculty	95	4.12	1.03
	HR	64	4.44	1.06

Author's calculation

The results of mean and standard deviation of competence of skills are shown in Table 1.2.According to student group analysis,information technology skill was scored highest with a mean score of 4.7 and critical thinking skill was scored lowest with a mean score of 3.45. According to faculty group analysis, leadership skill was scored highest with a mean score of 3.78 and critical thinking skill was scored lowest with a mean score of 3.22. According to HR group analysis, information technology skill was scored highest with a mean score of 3.69 and critical thinking skill was scored lowest with a mean score of 2.43.

Table 1.2
Descriptive statistics of respondent groups:
Competence

Skill	Respondent group	N	Mean	SD
Basic Literacy & numeracy skill	Student	176	3.68	1.12
	Faculty	95	3.47	0.994
	HR	64	3.19	0.9
Critical thinking skill	Student	176	3.45	0.984
	Faculty	95	3.22	1.01
	HR	64	2.43	0.696
Information technology skill	Student	176	4.7	1.16
	Faculty	95	3.24	1.06
	HR	64	3.69	1.13
Innovation skill	Student	176	3.89	1.24
	Faculty	95	3.54	1.06
	HR	64	3.23	1.07
Interpersonal skill	Student	176	3.74	1.12
	Faculty	95	3.66	0.976
	HR	64	3.56	1.19
Leadership skill	Student	176	4	1.05
	Faculty	95	3.78	0.926
	HR	64	3.56	1.06
Problem solving skill	Student	176	4.04	1.11
	Faculty	95	3.3	1.08
	HR	64	3.01	1.09

Author's calculation

Measurement scales:

Content validity of the instrument was established through expert review, whereby the questionnaire was shown to five corporate and academic discipline experts. As recommended by experts, few items were reworded and 2-3 were eliminated. For unidimensionality, EFA was conducted; PCA with varimax rotation explained a variance of nearly 80% and communalities were above 0.5 (Hair et al., 1999).

Reliability and convergent validity is shown in Table 2. Three tests were conducted to address reliability (Anderson and Gerbing, 1998): cronbach's α coefficient of all the variables was above thethreshold value of 0.70 (Nunnally, 1978), AVE (average variance explained) was found to be above the threshold value of 0.50 (Sharma, 1996) and CR (composite reliability) was found to be above the threshold value of 0.70 (Luque, 2000). To establish convergent validity, factor loads of all the variables were examined and were found to be significant and above threshold value of 0.50 (Hildebrandt, 1987). Thus, scale reliability and convergent validity was established.

Table 2

Reliability and Convergent validity of the scales

Construct dimensions	Factor loads	Cronbach's alpha	AVE	CR
Basic literacy & numeracy skill		0.797	0.565	0.836
BL1	0.709***			
BL2	0.844***			
BL3	0.817***			
BL4	0.762***			
Critical thinking skill		0.867	0.584	0.893
CT1	0.783***			
CT2	0.784***			
CT3	0.703***			
CT4	0.82***			
CT5	0.746***			
CT6	0.81***			
Information technology skill		0.884	0.650	0.902
IT1	0.75***			
IT2	0.849***			
IT3	0.839***			
IT4	0.819***			
IT5	0.844***			
Interpersonal skill		0.848	0.591	0.878
IP1	0.762***			
IP2	0.837***			
IP3	0.76***			
IP4	0.77***			
IP5	0.806***			
Leadership skill		0.825	0.543	0.855
LR1	0.758***			
LR2	0.774***			
LR3	0.806***			
LR4	0.69***			

LR5	0.793***			
Innovation skill		0.834	0.645	0.877
IN1	0.761***			
IN2	0.893***			
IN3	0.811***			
IN4	0.805***			
Problem solving skill		0.869	0.622	0.891
PS1	0.73***			
PS2	0.826***			
PS3	0.838***			
PS4	0.782***			
PS5	0.852***			

Note: ***p < .001; AVE, average variance explained; CR, composite reliability. Author's calculation

Discriminant validity of the scale is shown in Table 3. Two tests were conducted to establish discriminant validity: correlations among all the constructs were found to be below the maximum value of 0.8 (Hair et al., 1998), and squared correlations between each pair of variables were examined and were checked not to exceed AVE (average variance explained) for each variable (Fornell and Larcker, 1981).

Table 3

Discriminant validity of the scales

	Basic literacy & numeracy skill	**Critical thinking skill**	**Information technology skill**	**Innovation skill**	**Interpersonal skill**	**Leadership skill**	**Problem solving skill**
Basic literacy & numeracy skill	0.566	0.168	0.024	0.579	0.114	0.604	0.001
Critical thinking skill	0.41	0.584	0.548	0.127	0.011	0.198	0.001
Information technology skill	0.156	0.74	0.651	0.008	0.000	0.152	0.000
Innovation skill	0.777	0.445	0.39	0.617	0.784	0.646	0.013
Interpersonal skill	0.761	0.356	0.09	0.592	0.497	0.381	0.266
Leadership skill	0.338	0.105	0.009	0.705	0.544	0.615	0.051
Problem solving skill	0.027	0.703	0.017	0.516	0.225	0.114	0.622

Note: ***p < .001, Correlation values: below the diagonal, AVE values: along the diagonal, Square correlation values: above the diagonal

Author's calculation

Research Objective: To identify the difference in perception of importance and competence level of employability skills in management students across different respondent group (students, faculty, HR).

H0: There is no significant difference in perception of importance and competence level of employability skills in management students across different respondent group.

H1: There is a significant difference in perception of importance and competence level of employability skills in management students across different respondent group.

Literature recommends one way ANOVA test to evaluate the difference in perception of importance and competence level of employability skills in management students across different respondent group. Therefore, assumptions of one way ANOVA were checked, before applying the test. Leven's test was used to check the homogeneity of variance and Shapiro Wilk test was used to test the normality. Leven test results shows p value of less than .05 (Leven, 1960), indicating violation of the assumption of homogeneity of variance. Similarly, Shapiro Wilk test results shows p value of less than .05 (Shapiro and Wilk, 1965), indicating violation of the assumption of normality of data. In this situation, non-parametric test (Kruskal-Wallis) was conducted.

Kruskal-Wallis test results for importance of employability skills are shown in Table 4.1. Chi square test results of all the variables are found to be greater than the minimum threshold value of 5.99, suggesting rejection of null hypothesis. Similarly, p values of all the variables were found to be less than 0.05, suggesting rejection of null hypothesis. Therefore, it can be stated that statistical significant difference is found to exist in perception of importance of employability skills among student, faculty and HR groups.

Table 4.1
Kruskal-Wallis test results: importance of employability skills

Employability Skills	χ^2	Df	P
Basic literacy & numeracy skills	18.3	2	< .001
Critical thinking skills	16.8	2	< .001
Information technology skills	38.4	2	< .001
Innovation skills	7.52	2	0.023
Interpersonal skills	22.7	2	< .001
Leadership skills	12.7	2	0.002
Problem solving skills	43.5	2	< .001

Author's calculation

Kruskal-Wallis test results for competence of employability skills are shown in Table 4.2. Chi square test results of all the variables, except interpersonalskills were found to be greater than the minimum threshold value of 5.99, suggesting rejection of null hypothesis. Similarly, p values of all the variables, except interpersonal skills were found to be less than 0.05, suggesting rejection of null hypothesis. Therefore, it can be stated that statistical significant

difference is found to exist in perception of competence of employability skills except interpersonal skills among student, faculty and HR groups.

Table 4.2
Kruskal-Wallis test results: competence of employability skills

Employability Skills	χ^2	Df	P
Basic literacy & numeracy skills	11.4	2	0.003
Critical thinking skills	42.2	2	< .001
Information technology skills	86.1	2	< .001
Innovation skills	18.1	2	< .001
Interpersonal skills	1.28	2	0.527
Leadership skills	11.3	2	0.004
Problem solving skills	48.1	2	< .001

Author's calculation

Further, to find out specific difference in perception of respondent groups, DSCF multi group comparison was conducted. DSCF multi group analysis is an alternative to post hoc analysis for non-parametric tests. Pair wise comparison of perception regarding importance of employability skills is shown in Table 5.1. Following are the results of pair wise comparison:

Basic literacy &numeracy skill:For importance of basic literacy and numeracy skill, statistically significant difference was found to exist in the perception of student and HR group. Similarly statistically significant difference was found in the perception of faculty and HR group. On the contrary, no statistical significant difference was found to exist among student and faculty group response.

Critical thinking skill: For importance of critical thinking skill, statistically significant difference was found to exist in the perception of student and faculty group. Similarly, statistically significant difference was found among student and HR group. Whereas, no statistical difference was found between faculty and HR group response.

Information technology skill:For importance of information technology skill, statistically significant difference was found to exist in the perception of student and faculty group. Similarly, statistically significant difference was found among faculty and HR group. Whereas, no statistical difference was found between student and HR group response.

Innovation skill: For importance of innovation skill, statistically significant difference was found to exist in the perception of student and HR group. No statistical difference was found between student and faculty group. Similarly, no statistically significant difference was found among faculty and HR group response.

Interpersonal skill: For importance of interpersonal skill, statistically significant difference was found to exist in the perception of student and faculty group. Similarly, statistically significant difference was found among student and HR group. Whereas, no statistical difference was found between faculty and HR group response.

Leadership skill: For importance of leadership skill, statistically significant difference was found to exist in the perception of student and faculty group. Similarly, statistical significant difference was found among student and HR group. Whereas, no statistical difference was found between faculty and HR group response.

Problem solving skill: For importance of problem solving skill, statistically significant difference was found to exist in the perception of student and faculty group. Similarly, statistically significant difference was found among student and HR group. Whereas, no statistical difference was found between faculty and HR group response.

Table 5.1
DSCF multi group comparison results: Importance of employability skills

Employability Skill	Pairwise comparisons		p value
Basic literacy & numeracy skill	Student	Faculty	0.346
	Student	HR	< .001
	Faculty	HR	0.004
Critical thinking skill	Student	Faculty	0.001
	Student	HR	0.007
	Faculty	HR	0.95
Information technology skill	Student	Faculty	< .001
	Student	HR	0.936
	Faculty	HR	< .001
Innovation skill	Student	Faculty	0.369
	Student	HR	0.015
	Faculty	HR	0.6
Interpersonal skill	Student	Faculty	< .001
	Student	HR	< .001
	Faculty	HR	1
Leadership skill	Student	Faculty	0.029
	Student	HR	0.005
	Faculty	HR	0.601
Problem solving skill	Student	Faculty	< .001
	Student	HR	< .001
	Faculty	HR	0.074

Author's calculation

Pair wise comparison of perception regarding competence of employability skills is shown in Table 5.2. Following are the results of pair wise comparison:

Basic literacy & numeracy skill: For competence of basic literacy and numeracy skill, statistically significant difference was found to exist in the perception of student and HR group. On the contrary, no statistical significant difference was found between student and

faculty group responses. Similarly, no statistically significant difference was found among faculty and HR group perception.

Critical thinking skill: For competence of critical thinking skill, statistically significant difference was found to exist in perception of all the groups such as student and faculty; student and HR; faculty and HR group.

Information technology skill: For competence of information technology skill, statistically significant difference was found to exist in the perception of student and faculty group. Similarly, statistical significant difference was found among student and HR group. Whereas, no statistically significant difference was found between faculty and HR group response.

Innovation skill: For competence of innovation skill, statistically significant difference was found to exist in the perception of student and faculty group. Similarly, statistical significant difference was found among student and HR group. Whereas, no statistically significant difference was found between faculty and HR group response.

Interpersonal skill: For competence of interpersonal skill, no statistical significant difference was found to exist in perception of all the group such as student and faculty; student and HR; faculty and HR.

Leadership skill: For competence of leadership skill, statistically significant difference was found to exist in the perception of student and faculty group. Similarly, statistically significant difference was found among student and HR group. Whereas, no statistical significant difference was found between faculty and HR group response.

Problem solving skill: For competence of problem solving skill, statistically significant difference was found to exist in perception of all the group such as student and faculty; student and HR; faculty and HR group.

Table 5.2
DSCF multi group comparison results: Competence of employability skills

Employability Skill	Pairwise comparisons		p value
Basic literacy & numeracy skill	Student	Faculty	0.181
	Student	HR	0.004
	Faculty	HR	0.193
Critical thinking skill	Student	Faculty	0.018
	Student	HR	< .001
	Faculty	HR	< .001
Information technology skill	Student	Faculty	< .001
	Student	HR	< .001
	Faculty	HR	0.287
Innovation skill	Student	Faculty	0.003
	Student	HR	0.001

	Faculty	HR	0.627
Interpersonal skill	Student	Faculty	0.512
	Student	HR	0.93
	Faculty	HR	0.776
Leadership skill	Student	Faculty	0.022
	Student	HR	0.016
	Faculty	HR	0.886
Problem solving skill	Student	Faculty	< .001
	Student	HR	< .001
	Faculty	HR	0.035

Author's calculation

Discussion& Conclusion:

The present study aims to validate the scale proposed to measure importance and competence of employability skills in management students. Overall, the findings show significant statistical difference in perception of student, faculty and HR professionals with respect to importance and competence of all the understudy employability skills. Resultsare found to be consistent with previous researches. The findings of the present study corroborates with the study of Bennett (2002), Finch et al., (2013), Saeed (2015)which reported that interpersonal skills leads to enhanced employability. This study revealed consensus among faculty and HR professionals in regard to importance of interpersonal skills. Similarly, no significant difference was found in perception of student, faculty and HR group with reference to interpersonal competence of students.Information technology and innovation skill were rated as most important employability skills by all groups of respondents. And the competence attached to information technology and innovation skill by all groups of respondents is low in comparison to its importance, which substantiate with the study of Rosenberg et al., (2012). Interestingly, with reference to leadership skills, students were marked to be more competent in comparison to the desired level by faculty and students but HR professionals have a different opinion, which is in congruence with the study of Rosenberg et al., (2012) and IBM Global Human Capital Study (2008).Competence level of basic literacy and numeracy skills was found to be at par with the marked importance level, which is in congruence with the study of Jackson and Chapman, (2012) and Smith et al., (2016). But unlike the earlier studiessuch as Rosenberg et al., (2012) and 'National Association of Manufacturers (2005) Skills Gap report', basic literacy and numeracy skills were not marked as the most important skills by all the respondent groups in current study. The present study shows major skill gap in critical thinking skills of students (Harris and King, 2015; Jackson, 2013), and the associated level of importance in this study is contradicting to the study of Abbasi et al. (2018), which showed critical thinking skill not to be of much importance for entry level business graduates. Faculty and HR professionals reported a gap between importance and competence level of problem solving skills in students, which differs from earlier researches of Jackson and Chapman (2012).

Practical Implications:

According to Tymon (2013), employability skills should be developed in line with corporate expectations. Due to lack of information regarding expected skills, students fail to identify and develop the required skills (Lim et al., 2016). As per Finch et al., (2013), students can portray their employability skills in a better way, if they are aware of the employer's expectation. This study will help students in identifying the desired employability skills and the required areas of improvement. The skill gaps determined in this study will help universities and higher educationalists to review and revise their curriculum as per industry requirements. Universities are advised to embed required employability skills in their curriculum (Buarki et al., 2011; Cox and King, 2006) and final assessment (Rigg, 2013; Osmani et al., 2015). Additionally, universities should inculcate employment development opportunities as a part of their curriculum. This includes activities such as internships, industry projects, career development cell and corporate training(Swell and Pool, 2012).Managers and HR recruiters can take insights from this study to devise their recruitment plan and reduce turnover of newly recruited students (Lim et al., 2016).Moreover, this study will help curriculum designers and career counselors to amend their programs to enhance employability of students.

This study provides a base to policy makers/government officials to draft policies and plans to bridge skill gaps in students resulting in skilled Indian youth. As a result of which, productive human capital will help in accelerating economic growth and development and eventually leading to nation building.

Limitations and scope for future research:

First limitation of this study is narrow scope covering management students only. Secondly, the area of research is restricted to Delhi/NCR location. Third limitation is small sample size used in the study which decreases the generalizability of this research. Fourth limitation of this study is inclusion of only seven employability skills in the study, which may lead to short sighted view of employability. Cross-sectional research design is another limitation of this study.

Future research could be conducted in other academic disciplines such as engineering, psychology, medicine, nursing and education. Further study may be conducted in other cities or countries to validate the proposed scale for measurement of skill gap. Moreover, future studies could include other relevant determinants of employability. Longitudinal research design could be used in future studies to assess employability of students at different points of time. Increasing the sample size may lead to generalizability of the results of future studies.

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