Are Management Graduates Market Ready?
Exploring the Relationship between the Demographic Factors and the Perceived Level Job Preparedness

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ABSTRACT

The most important question nowadays is whether the organization or the institute will be able to provide its students with a good opportunity or a Job. Are these so-called big institutes can train them for their future endeavour? There are very few organizations in India which are really interested or dedicated towards the skill and holistic development of their students. The onus of the skill and holistic development of the students lies with both the organization and the students. The efforts taken by the organization can be measured through various means, and similarly, the efforts taken by the students can also be measured through their academic performance. One of the most important factors which affect the organization output is the placements, which in turn depends on whether the students are prepared for their future/ carrier or not. In this paper efforts, are made to find the preparedness level of the students, and the relation of the demographic features which affects the preparedness level of the students.

Keywords : Carrier Preparedness, Market Basket Analysis, Apriori Association Technique, Demographic Factors Job Preparedness, Employability, B-schools, & Management Program.

Introduction

Every job requires a set of related skills and a level of competence. Employers expect business graduates with certain skills for entry-level jobs. Students must understand that they cannot be successful in getting a good start without prior skills and job preparedness. Every profession requires related subject knowledge as well as other various managerial and behavioural skills which clearly contribute to the profession. ASSOCHAM (Associated Chambers of Commerce & Industry of India) has exposed that only 7% of MBA graduates are employable (ASSOCHAM, 2016; Business Standard, 2016; Financial Express, 2016; Economic Times, 2016; India Today, 2016; The Hindu, 2016; Reddy, 2016; Indian Express, 2016; Times of India, 2017). In the academic year 2016-17, only 47% of MBAs got jobs in campus drives, as AICTE (All India Council for Technical Education) reported (Pandey, 2017). It was a scandalous fact that every year 'un-employable' graduates are coming out from more than 5000 B-schools. It has raised questions on the abilities of B-schools, teachers' competence, the higher education system of the country (Sharma et al., 2018) and most importantly on students' job-preparedness. Students' job-preparedness is playing a primary role in their employability. However, students fail to gain the necessary skills (problem-detection, problem-solving, communication, and people skills) and managerial perspectives that make them employable.

It is very critical to B-schools that a hefty chunk of their students are unable to pass the minimum eligibility criterion to take a managerial role in the industry. One of the main reasons is management students' job preparedness. This study has conceptualized job preparedness as students' consciousness for and involvement in employability essentials i.e. knowledge, skills and attitude in accordance with the needs of organizations. During the course of finding the reasons why students are not market-ready, it has been observed that business classrooms generally hold demographically dispersed students. This demographic dispersion among students affects their affordability and adaptability which might have an effect on their academic performance and other career endeavours. Economic status, family size, educational history, cultural belonging (ethnicity), age and gender are demographic factors that define management students' personality characteristics. It is the most obvious observation that students face problem in their academic life because of these demographic differences, and a significant amount of students knowingly or unknowingly trying to cope-up with demographic differences. So that, it might be possible that students' demographic attributes affect their job-preparedness. Therefore, looking to the significance of the impact of the demographic profile of students on their job-preparedness and employability, this study has been realized.

Review of Literature

The business landscapes have been changed swiftly in the past couple of decades. The Shift in economic circumstances has to strengthen the global competition, which has enhanced the expectations of employers from their applicants. Every management student desire to secure a lucrative job in one of the best or competing organizations as he/she completed his/her management program (Tafamel & Adekunel, 2016). But, it requires that business graduates possess essential skills in response to ever-changing business landscapes (Ahmad & Pesch, 2017).

Many efforts have been made by scholars to evaluate the expectations of employers (Tesone & Ricci, 2012; DuPre & Williams, 2011) towards informing B-schools and students about what they both require to be prepared. Among these efforts, studies on the demographic factors affecting the perceived level of management students' job-preparedness have very scantly been performed. It is an undeniable fact that environmental variables and demographics have always been significant to people's physiological and cognitive development by which they are surrounded. Every student is characterized by different demographic features such as low/high-income family, culture, ethnicity, or parent's education (VanderStel, 2014). These demographic features have significant impacts on students' motivation, psychological well-being, and academic and career achievements.

Socioeconomic status of students' family is a substantial variable to predict their level of academic well-being and career preparedness. Interdisciplinary studies have confirmed that family income notably influences students' ability to succeed (Machebe et al, 2017; VanderStel, 2014; Okpala, 2002; Hodgkinson & Goldberg, 2000). It has been observed in many studies that low-income levels of families affected students' learning (Zhao et al., 2015; Zhang, 2012) and preparedness. Kinsler and Paven (2011) reported the relationship between family income and the quality of higher education students gained. Students from low-income families are more likely to display higher levels of stress and inferiority in the classroom (Dahl & Lochner, 2012; Parker et al., 1999) that also affect their job preparedness.

Students' culture and their family ties is a most important demographic determinant that decides the way they learn (VanderStel, 2014). Culture in a holistic sense is "a cumulative custom of beliefs, values, rituals and sanctions practised by a group of people, province or country" as Maheshkar and Sharma (2018, p.2) defined in Handbook of Research on Cross-cultural Business Education. B-schools are witnessed students of different cultures and ethnicity. According to Watson (2001) if the culture at both home and institutional levels are not cordial to learning, then it can harm students' academic achievement. In present, cultural

sensitivity and respect for diversity have been critical success factors to budding managers for getting a job and working with culturally diverse people (Maheshkar & Sharma, 2018). The most expected reason is that cultural differences reasonably influences people's ways of information processing and its transfer (Brewer, 2008) that has an effect on students' academic achievement and career progression, which could be direct or indirect.

Gender is another demographic factor that has an exclusive cognitive influence on students' understanding of academic achievement and readiness (Mondoh, 2001). As Wallen et al. (2017) opened, female MBA students found inferior in technical courses/subjects, but perform superior in social courses/subjects. According to some researchers, gender has a significant influence on students' level of satisfaction (Sax & Harper, 2005; Perry et al., 2003; Umbach & Porter, 2002) and then their job satisfaction (Robbins & Judge, 2008). Russell and Lehman (2008) reported female students to have a tendency to gain higher grades. In many cases, it has been observed that female students struggle more than their male counterpart, in terms of resources and attention needed to be successful (Tessema et al., 2012; Sax & Harper, 2005; Sax et al., 2004). The review reveals that male and female students have a significant difference between the learning styles (Sax & Harper, 2005; Crombie et al., 2003; Baxter Magolda, 1992). Considering the stated, it could be voiced that there is a difference in job preparedness of male and female students. So, it is suggested that male students should hold a higher academic performance since the increase of females in the workforce will keep competition high (Tessema et al., 2012).

Age is also included among the demographic attributes that could have an effect on students' readiness and academic performance. As Abdullah (2011) reported, younger students learn and perform better than aged students. It has verified the Grissom's (2004) claim that age and achievement hold a negative relationship. Ebenuwa-Okoh (2010) mentioned that age affecting the various developmental stages of students, as it increases.

It has been reported in some studies that recent graduates are poorly prepared for employment (Belkin, 2015). Employers expecting employable graduates possess competencies relevant in the related area, but students disappointing employers. It indicates students oblivious for job preparedness required to have and express the skills employers thought important to the related positions. The review reveals no study has been conducted on how demographic factors affect management students' perceived level of job preparedness.

Research Methodology:

The sentiments of scholars echoed students' sensitivity for their future professional roles and required preparedness are many responsive aspects for B-schools. As the review of a range of studies is signified the demographic attributes important to job preparedness of student. This investigation aimed to identify the level of students' job preparedness and association of their demographic profile with their perceived level of job preparedness. Thus, a scale developed by Koys (2017) was utilized to gauge job preparedness of management students.

Koys's scale consists of 12-items developed to evaluate the three constructs– career awareness, identifying opportunities, and career preparedness. In this scale, career awareness is describing the realization of career interests, necessary skills, career goals, occupation and industry; ability to identify opportunities is a sum of identifying opportunities matching career interests, abilities, values and goals; and career preparedness skills refers to initiative, planning and organizing skills, and technological skills (e.g., computer and internet-based applications). All the items were measured on Likert's 7-point scale. Students scored between 0-40 per cent were considered 'have required skills'; 40-75 per cent were considered 'have preferred skills'; and above 75 per cent were considered 'have desired skills'.

The data was collected from various management institutes of Bangalore during July to October 2018 through judgmental sampling method. A sample of size 1546 students from renowned B-schools in the city was examined. Questionnaire in an online format was sent to the students stating "Measure your perceived job preparedness level". As students submitted their responses, the perceived level of job preparedness is sent to each individual student through email. Possible measures were taken to get the best responses from the students. The data was first analysed through Chi-Square ($\chi 2$) test to evaluate the association between the demographic attributes of students and their perceived level of job preparedness, but it failed to give appropriate results so Market Basket Analysis was used. The apriori association technique in market basket analysis has been used to find the association between students' demographics and expected job-related skills (Larose, 2005; Berry & Linoff, 2004; Zhang & Zhang, 2002). It is a data-mining method initially used in the studies related marketing and consumer behaviour only (e.g., Agrawal et al., 1993); these days, it has been popularized in different areas of study (e.g., Kanagawa et al., 2009; Goh & Ang, 2007; Russell & Petersen, 2000).

The academic relevance of this study is advancing B-schools to understand students' career interests, occupational awareness, obligations to equip themselves with necessary skills, learning habits and ability to identify and approach career opportunities; so B-schools can prepare highly competent students for brighter career prospects.

There was two core objective of this study first, to identify the level of preparedness of the students and the second was to analyse the association of demographic profiles of students on their perceived job preparedness level.

Demographic profile

A total of 1546 responses were collected through a structured online questionnaire. In the sample observations, 44 per cent of the respondents were female and 56 male. The respondents belong to all the states of India from Andhra Pradesh to Kashmir, from Assam to Gujrat, from all corners of India. For the present study, the states had been divided into zones. The participation of central zone is nearly 7.6 per -cent, east zone contributes 14.5 per-cent, North East zone 1.4 per-cent, north zone 20.8 per-cent, west zone 4.3 and maximum by south zones nearly 50 per-cent. It was also found that 8.8 per-cent respondents reside in rural areas, 22.7 % in semi-urban and the rest 68.5 per-cent in urban area. As far as marital status is concerned most of the respondents were single (97.4%) and only 2.6 per cent were married. Nearly 60 per cent of respondents were having no work experience and out of the 40 per cent respondents, 9.2 per cent were having less than one year work experience, 16.5 per cent have 1-2 years' work experience, 12.1 per cent have 2-3 years' work experience, 3-4 years have 2.2 years' work experience and 0.7 per cent have 4- 5 years work experience.

As far as family income is concerned, the respondents family income was nearly equally distributed (0-3 Lakh, 3-5 Lakh, 5- 7 Lakh, 7-10 lakh, nearly 20% each), though the respondents of high-income group (10-15 lakh, 15 and above, nearly 10% each) were nearly fifty per-cent less as compared to low-income group.

The data reveals that nearly 43.2 per cent of the MBA programs were funded by the family, 16.1 per-cent is jointly funded by family and loan and 1.8 per-cent is done by self and family jointly. It was also observed that 12.8 per cent of the respondents funding was done by self and 8.1 per cent of the respondents funding was done by self and loan together.

The majority of the respondent's previous qualification (UG/PG) is engineering (39 %) and commerce (37%), next followed by management (13.2%) and science (8.4%), few were from arts (2 %) as well.

As far as the qualification of the parents is considered, nearly 57.1 per-cent had undergraduate and 22 per-cent had 22 per-cent, 4.4 per-cent had no formal education, and the remaining consist of CA/CS, Higher

qualification, even PhDs', diploma etc. Similarly, the qualification of the mother is considered, 50 per cent were undergraduate and 22 per-cent were postgraduate. The qualifications of both the parents were nearly similar.

From the data it is clear that most of the respondents' fathers were self-employed, 37 per-cent doing a professional job, and 9.5 per-cent technical job. Remaining were farmers, retired and other jobs. Nearly 64 per cent of the mothers were a housewife, 27 per-cent into the professional job, 2.6 per cent in technical jobs and remaining 5.9 per cent were self-employed.

The most important decision "what after MBA", nearly 92.3 per cent want to do a job, 4.8 per-cent want to be self-employed or entrepreneur. Very less 0.7 per cent wants to pursue higher education or will join the family business. Still, there are 1.5 per-cent respondents who have not even decided their next step.

The respondents were asked the second option if they don't get the desired placement, 49.5 per-cent would opt for the job, 26.4 would think of self-employment or entrepreneurship, 11 per-cent higher education, 4.4 per-cent planned to take up the family business and 8.8 per-cent were still unsure.

The respondents perceived job preparedness was measured and categorized into three categories, required skills, preferred skills and desired skills. Nearly 2.9 per cent of the respondents had required skills, 63 per-cent had preferred skills and 34.1 per-cent had desired skills.

Data Analysis

In order to find the association between the demographic profile categories and the perceived job skills levels of the management students, market basket analysis (MBA) was used. It is a data-mining technique that which was initially used in the field of marketing, nowadays has been used in nearly all the fields (Zhang & Zhang, 2002; Berry & Linoff, 2004 & Larose, 2005. Agrawal et al, (1993) used MBA in their research work related to marketing.

Association rule is a procedure which measures relationship among an item or group of items, with other items. MBA provides three measures of the degree of uncertainty associated with a given rule. These measures are support, confidence, and lift. In order to find the Association's rules, it needs to specify the minimum support and confidence. Support is expressed as a percentage, representing the probability that a randomly selected set of transactions from a database include the items or set of items in the whole set of transaction or dataset. Confidence, also expressed as a percentage, is the probability that a randomly selected set of transactions say A, will include an item given that they include other items say B. And lift is the confidence of the combination of item or set of items say A and other item say B divided by the support of another item B. When lift is greater than 1, item A and item B have a positive association; otherwise, they do not have significant relationship (Chambers 2008).

For the study, the minimum support considered is 0.10 and confidence to be 0.80. Other than support and confidence, the lift considered for the study is above 1, which indicates that there is a positive association between the two items.

For the market basket analysis, R software was used, after pruning the rules with minimum support 0.10, minimum confidence 0.8 and lift more than or equal to one, the rules found are tabulated in table No. 1.

Table No. 1- Apriori rules

S. No	Rules	support	confidence	lift
1	{Gender=Female,Place_you_belong_to=Rural} => {perceivedscorecat=preferred skills}	0.03663	1	1.587209
2	{Gender=Male,Career_options_after_MBA=Self-employed/ entreprene} => {perceivedscorecat=preferred skills}	0.029304	1	1.587209
3	{Gender=Female,Career_options_after_MBA=Self-employed/ entreprene} => {perceivedscorecat=desired skills}	0.018315	1	2.935484
4	{STATE=west Zone,Previous_Degree=Engineering} => {perceivedscorecat=preferred skills}	0.014652	1	1.587209
5	{Previous_Degree=Science,Total_Family_Income_per_annum=3-5 Lakh} => {perceivedscorecat=desired skills}	0.014652	1	2.935484
6	{Place_you_belong_to=Rural,Work_Experience=1-2 year} => {perceivedscorecat=desired skills}	0.014652	1	2.935484
7	{Previous_Degree=Management,Total_Family_Income_per_annum=15 lakh and above} => {perceivedscorecat=preferred skills}	0.014652	1	1.587209
8	{Total_Family_Income_per_annum=15 lakh and above,Work_Experience=1-2 year} => {perceivedscorecat=preferred skills}	0.014652	1	1.587209
9	{Total_Family_Income_per_annum=10-15 lakh,Work_Experience=1-2 year} => {perceivedscorecat=preferred skills}	0.014652	1	1.587209
10	{STATE=East Zone,Work_Experience=2 -3 year} => {perceivedscorecat=desired skills}	0.014652	1	2.935484
11	{Previous_Degree=Arts,Work_Experience=no experience} => {perceivedscorecat=preferred skills}	0.010989	1	1.587209
12	{STATE=North East Zone,Work_Experience=no experience} => {perceivedscorecat=preferred skills}	0.010989	1	1.587209
13	{Total_Family_Income_per_annum=7- 10 Lakh,Funding_for_the_MBA_Program=Self and Family} => {perceivedscorecat=desired skills}	0.010989	1	2.935484
14	{STATE=East Zone,Work_Experience=3 -4 year} => {perceivedscorecat=desired skills}	0.010989	1	2.935484
15	{STATE=west Zone,Total_Family_Income_per_annum=0 -3 Lakh} => {perceivedscorecat=preferred skills}	0.010989	1	1.587209
16	{STATE=North Zone,Place_you_belong_to=Rural} => {perceivedscorecat=preferred skills}	0.010989	1	1.587209
17	{Funding_for_the_MBA_Program=Loan,Work_Experience=less than 1 year} => {perceivedscorecat=preferred skills}	0.010989	1	1.587209
18	{Total_Family_Income_per_annum=10-15 lakh,Funding_for_the_MBA_Program=Loan} => {perceivedscorecat=preferred skills}	0.010989	1	1.587209
19	{Funding_for_the_MBA_Program=Self,Work_Experience=2-3 year} => {perceivedscorecat=desired skills}	0.010989	1	2.935484
20	{Funding_for_the_MBA_Program=Loan and family,Work_Experience=2-3 year} => {perceivedscorecat=desired skills}	0.010989	1	2.935484
21	{Previous_Degree=Management,Work_Experience=1-2 year} => {perceivedscorecat=preferred skills}	0.010989	1	1.587209
22	{Place_you_belong_to=Rural,Work_Experience=no experience} => {perceivedscorecat=preferred skills}	0.047619	0.928571	1.473837
23	{STATE=North Zone,Total_Family_Income_per_annum=5 -7 Lakh} => {perceivedscorecat=preferred skills}	0.040293	0.916667	1.454942
24	{Previous_Degree=Commerce,Place_you_belong_to=Rural} => {perceivedscorecat=preferred skills}	0.032967	0.9	1.428488
25	{STATE=North Zone,Work_Experience=1 -2 year} => {perceivedscorecat=preferred skills}	0.025641	0.875	1.388808

S. No	Rules	support	confidence	lift
26	{Gender=Female,Previous_Degree=Management} => {perceivedscorecat=preferred skills}	0.043956	0.857143	1.360465
27	{Previous_Degree=Science,Total_Family_Income_per_annum=5-7 Lakh} => {perceivedscorecat=preferred skills}	0.021978	0.857143	1.360465
28	{Previous_Degree=Management,Funding_for_the_MBA_Program=Family} => {perceivedscorecat=preferred skills}	0.062271	0.85	1.349128
29	{STATE=East Zone,Previous_Degree=Science} => {perceivedscorecat=preferred skills}	0.018315	0.833333	1.322674
30	{STATE=North Zone,Work_Experience=2-3 year} => {perceivedscorecat=desired skills}	0.018315	0.833333	2.446237
31	{Place_you_belong_to=Urban,Work_Experience=2-3 year} => {perceivedscorecat=desired skills}	0.065934	0.818182	2.40176
32	{Previous_Degree=Commerce,Total_Family_Income_per_annum=5-7 Lakh} => {perceivedscorecat=preferred skills}	0.047619	0.8125	1.289608
33	{Previous_Degree=Commerce,Funding_for_the_MBA_Program=Family} => {perceivedscorecat=preferred skills}	0.120879	0.804878	1.27751
34	{Gender=Female,Total_Family_Income_per_annum=0-3 Lakh} => {perceivedscorecat=preferred skills}	0.058608	0.8	1.269767
35	{STATE=North Zone,Previous_Degree=Commerce} => {perceivedscorecat=preferred skills}	0.043956	0.8	1.269767
36	{Total_Family_Income_per_annum=15 lakh and above,Work_Experience=2-3 year} => {perceivedscorecat=desired skills}	0.014652	0.8	2.348387

Discussion and Conclusion

From the apriori rule 1 from table No. 1, there is a high probability of a female from the rural place will have preferred skills. This is interesting to note that female students with a management degree, female students with family income of less than 3 lakh and a student (Male or Female) who wants to be an entrepreneur will have a preferred skill is high compared to others. There is no surprise in this result as female students are coming out to be more sincere and very focused in terms of job preparedness as compare to male students. This adds up the flavour when students willing to become an entrepreneur. This goes without saying in male students also as they are desirous of something great in their life.

Students from a science background with family income 3-5 lakh have a high probability to have desired skills. And Students with commerce background funded by family, having family income 5-7 lakh, and belongs to a rural area will have a high probability of having preferred skills. This is quite surprising as students with science and engineering background found to be more serious for their career. There could be various reasons for this kind of results, might be possible students have passed their undergraduate degree from some elite institute.

Students from the east zone with no experience, Students from east zone belongs to a rural area, Students from the east zone with family income 5- 7 lakh, Students from the east zone with industry experience 1-2 years, Students with work experience 2-3 years from the east zone, and Students from east zone who are funding their own education will have a high probability of having preferred skills. These results clearly indicate that students from east zone are more focused towards their career. There could be various reasons for such results. One of the most important reasons could be as they have very limited resources and opportunities in that part of the country. This makes them more competitive acquired the required skillset to get a job.

In conclusion, we can say that this study tried to explore the association between job preparedness of management graduates with their demographic factors and we found that the demographic factors play a crucial role in enabling students to get the required skills set to become industry ready. It is also found that the previous job experience makes more serious about career and it increases the perceived job preparedness. It

has also been identified that most of the students have desired and preferred the level of job preparedness but there are very few students with required skills set.

Limitation

The scale used in this study was only to measures the perceived preparedness level of students. Future study may incorporate a few more elements in the study. The population of the study was heterogeneous and it represents students from various states of the country so the results may not be generalized. The future study may use a focused approach and try to explore all possible dimensions of job preparedness rather.

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Appendix:

Parallel coordinates plot for 25 rules
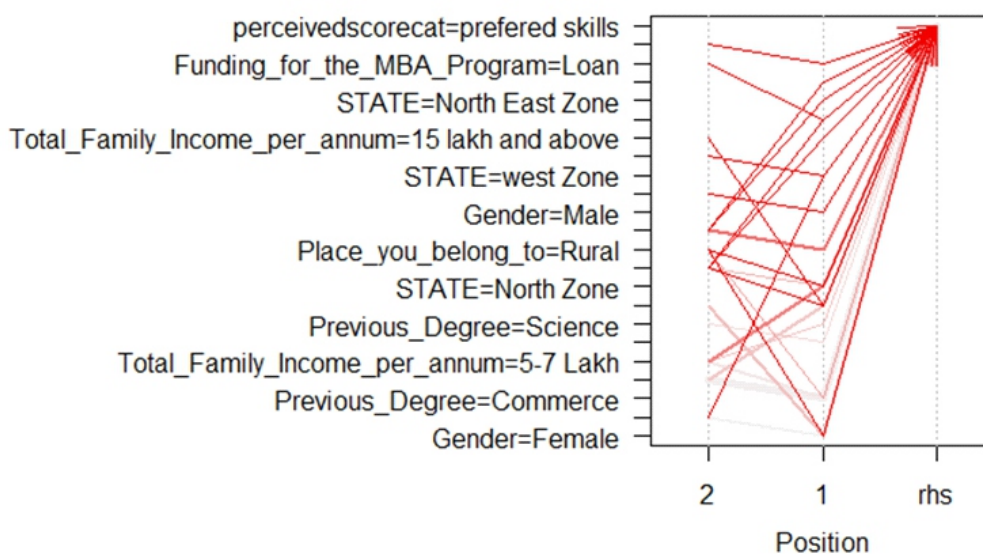
Parallel coordinates plot for 12 rules