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**Article**

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# Impact of family capital & social capital on youth entrepreneurship – a study of Uttarakhand state, India

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## Abstract

The research paper intends to interpret how the three forms of family capital viz. family's financial capital, family's man power capital and family's human capital influences the career choice intention of students of HEI's of Uttarakhand, India. Additionally the study also evaluates the impact of student's individual social capital on his career intent. This is a quantitative study conducted at Uttarakhand state of India on a large sample of students studying in various professional courses of Uttarakhand. The research validates a positive relationship between the family's financial capital and higher education intention of students. The study found no influence of family's financial capital (measured as father's annual income), manpower capital (measured as family size) and human capital (measured as father's occupation) on career intentions of students. The study confirmed that there is a significant impact of students' social capital network span on his career intentions, especially in taking up entrepreneurship as a career choice.

**Jel Codes:** D20; G34; L10

**Keywords:** Entrepreneurship; Factors influencing career choices; Family impact on career; Youth entrepreneurship in Uttarakhand; Family and career intentions; Family capital & youth entrepreneurship; Social capital & youth entrepreneurship

## Background

The Forbes list of billionaires featured 55 Indians in 2013 and the net worth of top ten billionaires was estimated at \$102.1 billion. In contrast, every second malnourished child and every third poor person in the world is also an Indian. This picture of sharp contrast clearly highlights that India has sharp rise in inequalities over years. Uttarakhand is the 27th state of India. It is located at the foothills of the Himalayan mountain ranges; it is largely a hill state, having international boundaries with China in the north and Nepal in the east. Uttarakhand has a unique culture of its own. It has a multiethnic population, mostly dependent on agriculture, tourism and handicrafts. People are spread across two recognized geo-cultural regions: the Garhwal, which corresponds roughly to the north-western half of the state and the Kumaun, which spans the southeast. Uttarakhand houses seven different ethnic groups, having as many as seven different cultures. More than four-fifths of Uttarakhand's residents are Hindu. Smaller communities of Muslims, Sikhs, Christians, Buddhists, and Jains make up most of the remainder of Uttarakhand's

people. Struggling with the problems of rising rate of unemployment and immigration, the state has introduced host of financial incentives to promote and develop entrepreneurship in the state. But the lukewarm response, especially from the youth in the state, has predicted that local people of the state are not business oriented people, they are more inclined towards jobs.

According to Lin (2000), differences in distribution of various types of capital across different groups in society lead to inequalities in career aspirations and economic achievement. Resource-based theory of entrepreneurship envisages that people's likelihood of becoming an entrepreneur is influenced by their access to valuable and unique resources (Alvarez & Busenitz, 2001; Barney, 2001). Resources refer to financial capital (Schweinbacher, 2007), family capital (Parcel & Menaghan, 1993) as well as human and social forms of capital (Chiles *et al.* 2007; Davidsson & Honig, 2003). We have hereby emphasized on social forms of capital including family capital. The notion of social capital has been around for decades. It is with the early works of Jacobs (1961), Bourdieu (1983), Coleman (1988) and Putnam (1993; 2000) that it gradually received recognition. According to Putnam (2000), social capital refers to connections among individuals – social networks and the norms of reciprocity and trustworthiness that arise from them. He further explains that social capital is closely related to civic virtue, the difference being that social capital calls attention to the fact that civic virtue is most powerful when embedded in a dense network of reciprocal social relations. In other words, social capital enables people to collaborate, socialize, establish communities and live together by adhering to moral obligations, norms and social values. As such, Social Capital Theory refers to the ability of actors to extract benefits from their social structures, networks, and memberships (Lin *et al.* 1981; Portes, 1998). Broadly the relevant literature has accepted that social capital enhances the likelihood of several individual outcomes (Burt, 1997; Nahapiet & Ghoshal, 1998). Entrepreneurs require information, capital, skills, and labor to start business activities. Although they try to manage many of these resources on their own, the shortfalls are fulfilled by accessing their contacts (Aldrich & Zimmer, 1986; Aldrich *et al.* 1991; Cooper *et al.* 1995; Hansen, 1995). When the entrepreneurs' social contacts contribute to their entrepreneurial goals, these social contacts are their social capital (Burt, 1992). Social capital helps in entrepreneurship development (Bhagvatula *et al.* 2010; Birley, 1986) but its relevance for youth career intent needs further exploration.

Family capital is considered to be a special type of social capital that exists in family relations (Parcel & Menaghan, 1993). Economic organization is largely structured around the family, with the family's survival essential to the long-term functioning of society (Coale, 1973). Chrisman *et al.* (2002) asserted that family represents a critical and often used resource for startups. It is well-documented in the entrepreneurship literature that entrepreneurs tend to rely heavily on their family capital to derive various benefits (Zimmer & Aldrich, 1987). Several studies indicate that family plays an important role in the mobilization of financial resources during the initial stage (Aldrich & Waldinger, 1990; Steier & Greenwood, 2000) and during survival times (Holtz-Eakin *et al.* 1994). According to Smallbone and Welter (2001), in most developing countries, people are dependent on their income to handle financial constraints in starting their business. A vast majority of entrepreneurs in these countries use their own resources to finance their business (Acs *et al.* 1999). Since students of HEI's in developing countries are either earning part time to generate some money to support themselves or entirely

depend upon their families for their education and other needed support, the role of families become even more important in career intent especially in taking up entrepreneurship as a career option. The career choice preference of an individual is at its highest point at student life and as such the influence of others, especially family & society, can result in determining entrepreneurial intention (Gelderen *et al.* 2008; Leffel & Darling, 2009). Family is seen to provide support for entrepreneurial start up in many ways. It has been found that the family plays an important role in the transmission of values such as independence, ambition, career orientation and actual career choice (Grimstad & Way, 1993). It helps in the provision of unique skills & pool of information (Greve & Salaff, 2003), human resources (Dyer & Handler, 1994; Aldrich & Langton, 1997) and physical resources (Birley, 1986) in the form of space and premises for enterprise development. Several research scholars (Wilson *et al.* 2007; Mueller, 2006; Matthews & Moser, 1996) have argued that family role models influence the preferences for self-employment. Cetindamar *et al.* (2012) states that family capital can be especially beneficial in facilitating individual's entrepreneurial entry in developing countries. Another type of capital which is seen to play a significant role in entrepreneurship development is human capital. Human capital refers to economically salient personal resources (skills, specific knowledge associated with particular jobs, general education) of the sort that might for example be considered by prospective employers as justifying offers of employment (Becker, 1964; Coleman, 1988). Scholars (Hitt *et al.* 2001) argue that human capital is the most critical resource that economic actors possess. When new economic opportunities exist, individuals with better human capital should have a higher likelihood of identifying and exploiting them. (Cetindamar *et al.* 2012).

Demographic structures of developed countries (Bianchi, 2014; Aksoy *et al.* 2012) as well as developing countries like India (James, 2011) are changing continuously and changing fast. It is seen that demographic variables have a significant impact not only on the economic variables like GDP, investments and inflation (Aksoy *et al.* 2012) but also on changes in the family (Bianchi, 2014). Demographic trends reveal an increasingly diverse and complex family life and a more ambiguous and fluid set of categories traditionally used to define the family (Cherlin, 2010). Changing trends in family composition and family members' role and relationships are witnessed in developed economies like USA (Walsch, 2012; Aldrich & Cliff, 2003) as well as in developing economies like Pakistan (Rehman & Roomi, 2012). Continuous changes in demographic structures and families could challenge the outcome of the earlier studies done on the role played by the demographic and family variables on entrepreneurial outcomes. Cramton (1993) has provided strong evidence that organizational foundings may represent responses to changing family relationships rather than outcomes of the rational assessments of discovered economic opportunities. This calls for a continuous study of effect of demographic and more specifically family variables on entrepreneurial outcomes. Furthermore, in spite of several studies on impact of social variables and demographic variables on entrepreneurial outcomes, the role of the family context for entrepreneurial orientation is not yet well understood (Cruz & Nordqvist, 2012). Similarly, Thornton *et al.* (2011) posit that the influence of social and cultural factors on enterprise development remains understudied.

Based on the above discussion, we have undertaken three forms of family capital viz. father's occupation as a measure of family's human capital, father's income as a measure of family's financial capital, family size as a measure of family's man power capital and

social network span of student as a measure of his individual social capital resource and evaluated their impact on students' career intent, more specifically entrepreneurial intent. The outcomes of the research would help the state government understand the impact of social & familial factors on youth entrepreneurship which can be used to formulate appropriate policies for youth entrepreneurship development in Uttarakhand. The research would also help educational institutions to do appropriate modifications in the curriculum to develop youth entrepreneurship.

#### **Review of literature and hypothesis formulation**

The youths' access to financial resources help ease the transition into self-employment (Henley, 2005; Delmar & Davidson, 2000) and that is one of the main reasons why the children born in rich family find it easy to venture on their own. The children may have less pressure to make a living by finding a stable job and tend to be more risk-taking. These factors indirectly impact entrepreneurial intention through the perception of desirability and feasibility (Wang *et al.* 2011). According to Dunn & Holtz-Eakin (2000) high income households are not only able to better provide the necessary financial resources to entrepreneurial firm growth but are also likely to see more entrepreneurial growth opportunities. Rajman (2001) posited that financial resources in the family have direct bearing on entrepreneurial intentions. A lot of studies have shown that family income influences the career development of youth (Alibaygi & Pouya, 2011; Mortimer, 1992) and self-employment of youth (Hundley 2006; Henley 2005). The financial status of the family has been observed to have an impact on the child's choice of entrepreneurship (Hsu *et al.* 2007). Study by Millman *et al.* (2010) also confirmed that household incomes are positively related to their entrepreneurial Intentions. A recent study done by Nandamuri and Gowthami (2013) tested 11 competencies related to entrepreneurial orientation of management students and found that the household income significantly influences nine out of eleven competencies. Accordingly we propose the first hypothesis.

***H<sub>1</sub> : Annual income of the family has an influence on the career intentions of students' of HEI's***  
According to Schulenberg *et al.* (1984), family size appears to influence adolescent career aspirations because parents with large families tend to have less money to aid the older children in attending college, while younger children may receive more financial assistance since the financial strain is less once the older children leave home. A recent study by Cetindamar *et al.* in 2012 at Turkey found that family size was positively associated with the likelihood of engaging in entrepreneurship only when family size is more than seven people. People who had a family size of seven or more were 1.768 times more likely to engage in entrepreneurship compared with people who had fewer than three people in their family. In contrast, another study conducted by Pushpalatha (2013) in India found that majority of the women in Andhra Pradesh, India who turned into entrepreneurs had an average family size of 2–3 members. She interpreted that small family size have lessened their family responsibilities which motivated them to enter into entrepreneurship. Weber (1978) posited that cooperation from within a family stems not just from pure self-interest, but from a greater moral order in which the accumulation of obligations among members builds a kind of social cohesion that may be described as 'household communism'. According to Cetindamar *et al.* (2012), family members can be trusted in under-the-counter transactions aimed at evading taxes and

other government regulations that are common in new and small businesses in many parts of the world, such as in developing countries. While larger families could contribute to greater motivation, larger social network and better support. Smaller families may provide more time and fewer obligations that would enable them to engage in diverse activities required in new business settings and taking more risks. A recent report by Global Entrepreneurship Monitor (Kelly *et al.* 2012) found that average household size for male and female entrepreneurs ranged from three people in Europe and the U.S. to five people in Sub-Saharan Africa and MENA/Mid-Asia. Finland, Austria, Denmark and Germany showed the smallest household sizes for both female entrepreneurs and non-entrepreneurs/business owners: less than three people per household on average. In Pakistan, Angola and Palestine, on the other hand, households for both groups averaged over six individuals; accordingly we propose our next hypothesis.

***H<sub>2</sub> : Size of the family has an influence on the career intentions of students' of HEI's***

Most of the authors (Colombier & Masclat, 2008; Sørensen, 2007; Carr & Sequeira, 2007; Drennan *et al.* 2005; Arum & Mueller, 2004; McElwee & Al-Riyami, 2003; Krueger, 1993a; Krueger 1993b; Scott & Twomey, 1988) in the past have advocated that the children who grew up with entrepreneur parents had a greater propensity to choose an entrepreneurial career. According to Wang *et al.* (2011), due to the example of the self-employed parents, children with family business background have a higher probability to become entrepreneurs. Moreover, self-employed parents can provide more financial and (or) social support to their children to start their own business. According to Corak and Piraino (2011) & Dunn and Holtz-Eakin (2000) second generation entrepreneurs are two to three times more likely to work in the same occupation as their fathers. A study by Olomi and Sinyamwale (2009) found that the students who had families which engaged in business had been better socialized to the entrepreneurial career and were likely to engage in starting their own businesses. Studies conducted in different countries like US (Crant, 1996); Singapore (Phan *et al.* 2002); UK (Altinay *et al.* 2012) and Malaysia (Tong *et al.* 2011) gave similar results and found that entrepreneurial families or parents positively influence entrepreneurial career intentions in their children. Lindquist *et al.* (2012) found that having an entrepreneur for a parent increases the probability that own-birth children become entrepreneurs by 60%. Davidsson showed that the average of 40% of small business owner managers in Sweden have had a self employed parent(s) (Davidsson, 1995). The impact of family business background has been proven in several other studies as well (White *et al.* 2007; Hout & Rosen, 2000). On the basis of the above discussion, the following next hypothesis is proposed.

***H<sub>3</sub> : Father's occupation has an influence on the career intentions of students' of HEI's***

Social capital refers to the relationships, either formal or informal, generated by individuals in their interaction with other individuals trying to obtain an expected reward in the market, a capital captured in the form of social relationships (Lin, 2003). Social capital comprises of a person's social connection in family, professional and social networks, friends, entrepreneurial role models and other known supporting networks comprising of investors, potential customers, bankers etc. Social capital has been linked to a variety of positive social outcomes, such as better public health, lower crime rates,

and more efficient financial markets (Adler & Kwon, 2002). One of the latest research on social capital showed that individuals in communities with high levels of social trust are more likely to be self-employed compared to individuals in communities with lower levels of social trust. Additionally, membership in organizations connected to the larger community is associated with higher levels of self-employment, but membership in isolated organizations that lack connections to the larger community is associated with lower levels of self-employment (Kwon *et al.* 2013). According to Davidsson and Honig (2003) bridging and bonding social capital, consisting of both strong and weak ties, was a robust predictor regarding who became a nascent entrepreneur as well as for advancing through the start-up process. A recent study by Kreiser *et al.* (2013) found that an increase in network tie strength is negatively associated with founding activities whereas an increase in the number of ties is positively associated with founding activities. Many other authors (Tararko & Schmidt, 2013; Bauernschuster *et al.* 2010, Linan, 2007) have also emphasized upon the positive role of social capital in facilitating entrepreneurship. Social capital helps in opportunity identification (Bhagvatula *et al.* 2010), establishment of business (Birley, 1986) as well as in firm performance (Stam *et al.* 2014). Another recent study by Light and Dana (2013) suggests that social capital promotes entrepreneurship only when supportive cultural capital is in place. Similarly Malecki (2009) has also argued that people living in different regions have different levels of trust and interaction among themselves so regional outcomes with regard to social entrepreneurship will vary. As such we formulate our next hypothesis.

***H<sub>4</sub> : The social capital network span of student has an influence on the career intentions of students' of HEI's***

#### **Research Methodology**

Quantitative research was used to conduct this study. The quantitative approach has helped us to prevent bias in gathering and presenting research data and the discussion and experimentation involved in the process are more objective. A self-administered questionnaire was developed & used as the main data-gathering instrument for this study. Questions regarding the career intentions after completion of degree, family size, father's occupation and father's income were asked directly and multiple choices were given to them to choose from. In order to determine the extent of social capital of students, 24 statements derived from 'Sociological Capital Assessment' developed by Roberts (2010) were used. The answers were recorded on Likert's 5 point scale. Since the study tends to evaluate the preferred career choices of students of professional courses the target respondents were the final year students of higher educational institutions of Uttarakhand, studying in B.Tech., MBA, PGDM, BHMCT, B.Pharm. and MCA courses. Students were typically in the age group of 21–25 years. Gender ratio of the respondents was 25% female students and 75% male students. The sampling method used in this research is proportionate stratified sampling. Students from each course were picked up based on their prevalence in the universe. This type of sampling has helped us in properly representing each stratum so the sample size drawn from the stratum is proportionate to the stratum's share of the total population. The respondents were the students of Uttarakhand state only. The whole universe of the target respondents was nearly 20,300. For a size of population which falls

in the range of 20,000, the sample size for a 95% confidence level with a reliability of  $\pm 3\%$  the sample size suggested is 530 (Zikmund, 2010). Accordingly, the sample size taken for this study is 530.

### Data Analysis and Interpretation

On the basis of the data collected, the hypotheses have been tested using various statistical tools.

#### *H<sub>1</sub> : Annual income of the family has an influence on the career intentions of students' of HEI's*

Based on the average annual income of their family, the students were divided into three different income categories (Table 1).

To test the above hypothesis we have cross tabulated the data and used Chi-square test Table 2.

Cross tabulation displays the number of cases in each category defined by two grouping variables i.e. 'Average annual income' and 'Career choice preference after completion of degree'. Total out of 530 respondents, 355 respondents are from 'Low' income group, 125 respondents are from 'Middle' income group and 50 respondents are from 'High' income group category. The data indicates that irrespective of the income group the intention to become an entrepreneur remains to be low among all three income groups however the desire to seek a job is significantly reduced in high income group students in comparison to low and middle income group students and desire to go for higher education significantly increases in comparison to low and middle income group students.

Table 3 contains the output of the Chi-square test. A low significance value of 0.012 and 0.031 of Pearson Chi-square test and likelihood ratio typically below 0.05 indicates that there may be a relationship between the two variables. Since the calculated value of Chi-square ( $\sim 16.287$ ) is greater than the tabulated value ( $\sim 12.592$ ), it is evident that variables 'Income category' and 'Career intention after completion of degree' are dependent. Since opting for higher studies is not actually a career, it is a postponement of the career choice, we have discounted the two options of 'Go for higher studies' and 'Not yet decided' and reapplied Chi-square test on the variables in order to get a precise picture of the relationship between income category & students' career intentions of starting a new business or seeking a job Table 4.

Since the calculated value of Chi-square ( $\sim 1.78$ ) is greater than the tabulated value ( $\sim 5.99$ ), it becomes clear that 'Annual income' of the family does not actually influence the career intentions of starting an enterprise or seeking a job but the test applied earlier at Table 3 confirms that it does have an influence on the intention to pursue higher studies.

#### *H<sub>2</sub> : Size of the family has an influence on the career intentions of students' of HEI's*

Based on the family size of student, four categories were defined. The first category was "Less than or equal to 4 members", second category was "5 to 6 members", third category

**Table 1 'Income category' vis-à-vis 'Average annual income'**

Average annual income	Income category
Below Rs.3.00 Lakh PA	Low
Rs.3.00 – Rs.5.99 Lakh PA	Middle
Rs.6.00 Lakh and above	High

**Table 2 Cross tabulation: 'Income category' and 'Career choice preference after completion of degree'**

Career choice preference after completion of degree	Income category			Total
	Low	Middle	High	
Start a new business	21	6	2	29
Seek a suitable job	269	94	27	390
Go for higher studies	46	16	16	78
Not yet decided	19	9	5	33
Total	355	125	50	530

was “7 to 8 members” and the fourth category was “9 members and above”. The career choice preferences of students were bifurcated based on the above defined four categories Table 5.

Cross tabulation displays the number of cases in each category defined by two grouping variables i.e. 'Family size' and 'Career choice preference after completion of degree'. Out of a total of 530 respondents 249 respondents fall in the category of 'Less than or = 4 members', 214 respondents fall in the '5-6 members' category, 45 respondents fall in the category of '7-8 members' and only 22 respondents fall in the '9 members and above' category. To test the above hypothesis, researcher has applied Chi-square test.

Table 6 contains the output of the Chi-square test. A significance value of 0.181 and 0.262 of Pearson Chi-square indicates non-dependence of 'Family size' on 'Career intention of student after completion of degree.' Since the tabulated value of Chi-square (~16.919) is greater than the calculated value (12.621), it is evident that variables 'Family size' and 'Career intention after completion of degree' are independent. We again applied Chi-square on the variables after discounting the two options of 'Go for higher studies' and 'Not yet decided', in order to get a precise picture of relationship between students' family size and their career intentions of starting a new business or seeking a job Table 7.

Again the calculated value of Chi-square (~5.942) is greater than the tabulated value (~7.82). This confirms that we can reject the hypothesis at 5% level of significance. Hence we can say that manpower capital of the family, measured as the family size, does not influence the career intentions of students.

***H<sub>3</sub> : Father's occupation has an influence on the career intentions of students' of HEI's***

Father's occupation was categorized into six different categories and arranged in a hierarchical structure based on both income and status. In the first and lowest in the hierarchy was the category 'Others' which included those fathers who are retired or are home makers or have expired. In the second category we included farmers & skilled persons like electricians, mechanics etc. or low paid employees, in the third

**Table 3 Chi-square Test: 'Income category' and 'Career choice preference after completion of degree (including option of 'Going for higher studies and 'Not yet decided'**

	Value	df	Asymp. sig. (2-sided)
Pearson Chi-square	16.287 <sup>a</sup>	6	.012
Likelihood ratio	13.878	6	.031
Linear-by-linear association	7.956	1	.005
N of valid cases	530		

<sup>a</sup>2 cells (16.7%) have expected count less than 5. The minimum expected count is 2.74.

**Table 4 Chi-square Test: 'Income category' and 'Career choice preference after completion of degree' (excluding option of 'Going for higher studies and 'Not yet decided')**

	Value	df	Asymp. sig. (2-sided)
Pearson Chi-square	.178 <sup>a</sup>	2	.915
Likelihood ratio	.183	2	.913
Linear-by-linear association	.087	1	.768
N of valid cases	419		

<sup>a</sup>1 cells (16.7%) have expected count less than 5. The minimum expected count is 2.01.

category we included small business owners, in the fourth category we included self practicing professionals like doctors, lawyers, chartered accountants etc., in the fifth category we included employees working in responsible positions in government departments or private organizations, finally in the sixth category & highest in the hierarchy we included top management executives or mid sized and large business owners. Students were asked a direct question about their father's occupation and six multiple choices, as discussed above, were given to the students. The data was cross tabulated on the basis of students' career choice preference and their father's occupation (Refer to table 8). To test the above hypothesis we have applied Chi-square test.

Cross tabulation displays the number of cases in each category defined by two grouping variables i.e. 'Prior experience in business' and 'Career choice preference after completion of degree'. Total out of 530 respondents 256 respondents said that their father fall in the category of 'Reputed salaried employees', 113 told that their father is a small business owner, 92 said that their father is a farmer, 35 students told that their father is a professional and 34 students placed their father's occupation in 'others' category which meant that their father was either retired or not working or had expired. The above data clearly reveals that over 76% of the students whose father's occupation status was 'Reputed salaried employees' want to take up a job while only 7.9% of the students whose father's occupation status was 'small business owners' want to become entrepreneurs.

Table 9 contains the output of the Chi-square test. A high significance value of 0.174 & .202 and significance value above 0.05 indicates that there is no relationship between the two variables. The tabulated value of Chi-square (~21.026) is found to be greater than the calculated value (~16.399), it therefore becomes evident that variables 'Fathers' occupation' and 'Intention after completion of degree' are independent. We again

**Table 5 Cross tabulation: 'Family size' and 'Career choice preference after completion of degree'**

Career choice preference after completion of degree	Total family members				Total
	Less than or = 4 members	5-6 members	7-8 members	9 and above members	
Start a new business	11	11	5	2	29
Seek a suitable job	191	160	25	14	390
Go for higher studies	32	29	12	5	78
Not yet decided	15	14	3	1	33
Total	249	214	45	22	530

**Table 6 Chi-square Test: 'Family size and 'Career intention after completion of degree' (including option of 'Going for higher studies and 'Not yet decided')**

	Value	df	Asymp. sig. (2-sided)
Pearson Chi-square	12.621 <sup>a</sup>	9	.181
Likelihood ratio	11.206	9	.262
Linear-by-linear association	.334	1	.563
N of valid cases	530		

<sup>a</sup>5 cells (31.3%) have expected count less than 5. The minimum expected count is 1.20.

applied Chi-square on the variables after discounting the two options of 'Go for higher studies' and 'Not yet decided', in order to get a precise picture of relationship between fathers' occupation and students' career intentions Table 10.

Again the calculated value of Chi-square (~8.015) is greater than the tabulated value (~9.49). This confirms that we can reject the hypothesis at 5% level of significance. This justifies that there is no relationship between father's occupation and the career intentions of students after completion of their course or in other words between human capital of the family and career intent.

***H<sub>4</sub> : The social capital network span of student has an influence on the career intentions of students' of HEI's***

We used 24 statements taken from Roberts (2010) 'Sociological Capital Assessment' to identify the extent of social capital. Score stood 5 points for strongly agree and 1 point for strongly disagree. Accordingly, three categories were developed between the score of 24 and 120 as given below in Table 11.

In order to test this hypothesis we have applied Chi-square test Table 12.

Cross tabulation displays the number of cases in each category defined by two grouping variables i.e. 'Social capital network' and 'Career choice preference after completion of degree'. Total out of 530 respondents 235 respondents have 'Large' level of social capital network, 241 respondents have 'Moderate' level of social capital network and 54 respondents have 'Small' level of social capital network span. The above data reveals that as the level of social capital network span increase there is a corresponding increase in the entrepreneurial intentions of students and decrease in the ratio of job seeking preferences of students.

Table 13 contains the output of the Chi-square test. A low significance value of 0.009 & .003, typically below .05 indicates that there is a relationship between the two variables. Further, since the calculated value of Chi-square (17.203) is greater than the tabulated value (12.592), it becomes evident that the variables 'Social capital network' and 'Career intention after completion of degree' are dependent. We again applied

**Table 7 Chi-square Test: 'Family size and 'Career intention after completion of degree' (excluding option of 'Going for higher studies and 'Not yet decided')**

	Value	df	Asymp. sig. (2-sided)
Pearson Chi-square	5.942 <sup>a</sup>	3	.114
Likelihood ratio	4.690	3	.196
Linear-by-linear association	3.674	1	.055
N of valid cases	419		

<sup>a</sup>2 cells (25.0%) have expected count less than 5. The minimum expected count is 1.11.

**Table 8 Cross tabulation: 'Father's occupation' and 'Career choice preference after completion of degree'**

Career choice preference after completion of degree	Father's occupation						Total
	Top mgt. executives/ Large business owners	Reputed salaried employees	Professionals	Small bus. owners	Farmers	Others	
Start a new business	0	8	1	9	9	2	29
Seek a suitable job	0	196	24	86	61	23	390
Go for higher studies	0	35	9	14	15	5	78
Not yet decided	0	17	1	4	7	4	33
Total	0	256	35	113	92	34	530

Chi-square on the variables after discounting the two options of 'Go for higher studies' and 'Not yet decided', in order to get a precise picture of relationship between students' career intentions and their social capital network span Table 14.

The calculated value of Chi-square (~13.496) is again found to be greater than the tabulated value (~9.21) at 1% level of significance thus we accept the hypothesis. This justifies that there is a significant influence of social capital network span on the career intentions of students.

### Result and discussion

The findings of the study reveal that in Uttarakhand state there is an effect of income of family on the students' intention of going for higher studies after completion of degree. In comparison to 13% of the respondents from the 'Low' & 'Middle' income group who are interested in higher studies after completion of their degree there are 32% respondents from 'High' income group who are interested to continue with higher studies. The analysis revealed that family income has an influence on the students' choice of going for higher studies but has no influence on the actual career choice of starting a business or seeking a job. The result compliments Torche and Spilerman (2010) who posited that wealthier households are less restricted and can make long-term investments, such as education for children. The finding also supports Gary Becker's household production theory and the human capital theory which directly links household resources and investments to the educational attainments of children (Becker, 1964). A considerable shift in job intentions of students is seen while moving from 'Low' and 'Middle' income group to 'High' income group families. While 77% of the respondents from the 'Low' income group and 75% of the respondents from the 'Middle' income group want to take up job after passing their degree, a comparatively low 54% of the respondents from the 'High'

**Table 9 Chi-square Test: 'Father's occupation' and 'Career intention after completion of degree' (including the options 'Going for higher studies and 'Not yet decided')**

	Value	df	Asymp. sig. (2-sided)
Pearson Chi-square	16.399 <sup>a</sup>	12	.174
Likelihood ratio	15.764	12	.202
Linear-by-linear association	.328	1	.567
N of valid cases	530		

<sup>a</sup>4 cells (20.0%) have expected count less than 5. The minimum expected count is 1.86.

**Table 10 Chi-square Test: ‘Fathers’ occupation’ and ‘Career intention after completion of degree’(excluding the options ‘Going for higher studies and ‘Not yet decided’)**

	Value	df	Asymp. sig. (2-sided)
Pearson Chi-square	8.015 <sup>a</sup>	4	.091
Likelihood ratio	7.750	4	.101
Linear-by-linear association	2.395	1	.122
N of valid cases	419		

<sup>a</sup>3 cells (30.0%) have expected count less than 5. The minimum expected count is 1.73.

income group are eager to take up jobs. The results compliment the earlier studies by Kothari (2013), who ascertained that students of ‘High’ income group families are less inclined towards taking up jobs but also disagrees with him & Hsu *et al.* (2007) on the aspect that students of ‘High’ income group families are likely to take up entrepreneurship as a career. Our study observes that interest in starting up a new venture is seen to be considerably low (less than 6%) among all income groups and no significant variation was seen in all three income groups. This shows that merely belonging to a high income group family does not guarantee entrepreneurship or even transfer of entrepreneurship from father to children supporting the studies by Thrikawala (2011), Mueller (2006) and Kim *et al.* (2003) who found that there was no significant relationship between family income and overall entrepreneurial intention among the students. Sørensen (2007) also stated that parental wealth does not explain the transfer of entrepreneurship. Studies by Fairlie and Robb (2007) & Aldrich *et al.* (1998) found that a very low number of business owners borrow capital from their family. Again father’s occupation of the respondents was also seen to have no influence on the career intention of students. Over 76% of the students whose father’s occupation status was ‘salaried employee’ wanted to take up a job while only 7.9% of the students whose father’s occupation status was ‘small business owners’ wanted to become entrepreneurs. Although this finding is in conflict with most of the earlier studies (Lindquist *et al.* 2012; Plant & Ren, 2010; Carr & Sequeira, 2007; Mueller, 2006; Mc Elwee & Al-Riyami, 2003) advocating that children who have entrepreneur parents have a greater propensity to choose an entrepreneurial career, our finding is in agreement with two recent studies done in two different universities of Pakistan first by Mubarka *et al.* (2012), who explored the impact of father’s occupation on the entrepreneurial inclination of the students and found no significant impact. The second study was by Ali *et al.* (2010), who found that father’s income and profession of father does not affect entrepreneurial attributes significantly. The possible explanation to this effect could be the poor socio-economic climate and unfeasible business environment. Ali *et al.* (2010) has talked about poor socio-economic climate and poor business environment in Pakistan and the same is indicated to be true for Uttarakhand (Sharma & Madan, 2014). Keeping the existing theories of effect of parental income and occupation into account and the present study, we may extend the existing theory that the demographic factors like parental

**Table 11 Social capital network span vis-à-vis score of the candidate**

Score of the candidate	Social capital network
24 – 54	Small
55 – 90	Moderate
91 – 120	Large

**Table 12 Cross tabulation: ‘Social capital network’ span and ‘Career intention after completion of degree’**

Career choice preference after completion of degree	Social capital network			Total
	Large	Moderate	Small	
Start a new business	21	8	0	29
Seek a suitable job	157	189	44	390
Go for higher studies	40	33	5	78
Not yet decided	17	11	5	33
Total	235	241	54	530

income & occupation has an effect on the entrepreneurial inclination, when the business environment is conducive. A recent study by Cetindamar *et al.* (2012) gives further support to the argument. The study found that income has a positive influence on entry into entrepreneurship. The study was conducted in Turkey, which is another developing country like India but it has witnessed tremendous economic growth and development. Turkey is known to be the 17th most industrialized nation in the world and has a worldwide ranking of 92 on GDP (Cetindamar *et al.* 2012) indicating that Turkey has a healthy economic and business environment. Another aspect that needs to be noted in this context is the recent study by Zellweger *et al.* (2011) who proved that transitive likelihood of career intent depends on degree of entrepreneurial self-efficacy and the independence motive. They found that high levels of internal locus of control lead to a preference of employment, which challenges traditional entrepreneurship research and suggests that the feasibility of an entrepreneurial career path does not automatically make it desirable. Their findings suggest that students with family business background are pessimistic about being in control in an entrepreneurial career. No influence of family size is seen on the career intention of students. The career choice intention of becoming an entrepreneur remained to be low among all family sizes. This finding is in disagreement with the study by Cetindamar *et al.* (2012) but we do agree with them that the result may not be considered to be conclusive in nature and it is an area which needs further indepth research. Our study confirms that social capital of student has a significant influence on the career intentions of students. As the level of social capital network span increase there is a gradual increase in the entrepreneurial intention of students and a corresponding decrease in the ratio of job seeking preferences of students. The results of Chi-square test have confirmed that this shift is not by chance but there is a relationship between the variables. The finding is in agreement with most of the similar studies done earlier (Tararko, 2013; Leiffel *et al.* 2009; Linan, 2007) which have stressed that social capital can facilitate the implementation of entrepreneurial

**Table 13 Chi-square Test: ‘Social capital network span’ and ‘Career choice preference after completion of degree’ (including the options ‘Going for higher studies and ‘Not yet decided’)**

	Value	df	Asymp. sig. (2-sided)
Pearson Chi-square	17.203 <sup>a</sup>	6	.009
Likelihood ratio	19.791	6	.003
Linear-by-linear association	.018	1	.894
N of valid cases	530		

<sup>a</sup>2 cells (16.7%) have expected count less than 5. The minimum expected count is 2.95.

**Table 14 Chi-square Test: ‘Social capital network span’ and ‘Career choice preference after completion of degree’ (excluding the options ‘Going for higher studies and ‘Not yet decided’)**

	Value	df	Asymp. sig. (2-sided)
Pearson Chi-square	13.496 <sup>a</sup>	2	.001
Likelihood ratio	15.092	2	.001
Linear-by-linear association	12.802	1	.000
N of valid cases	419		

<sup>a</sup>1 cells (16.7%) have expected count less than 5. The minimum expected count is 2.28.

intentions. Taking the results into consideration, the study digests that state government need to work upon improving the business environment in the state. The government and educational institutions may include community building activities in enterprise training programs, such activities have been found to be highly effective in micro enterprise training programs being conducted at USA. Two such programs (ex. Women’s Initiative in San Francisco and Working Capital in Boston) build community primarily by creating inter-program & intra-program networks, this builds social capital which in turn supports entrepreneurship development. These programs have been found to be successful in building social capital and subsequently entrepreneurship development at USA (Servon, 1998). With the continuous changes being witnessed in the demographic structures and families some non-obvious results challenging the traditional results may be expected in future studies done to find the impact of familial and social variables on entrepreneurial outcomes. The author therefore encourages future research to be carried out in similar areas and in different regions.

### Conclusion and Limitations

The study confirmed that financial capital of the family (measured as father’s occupation) has no influence on the actual career choice of starting a business or seeking a job, although it does influences the students’ intention of going for higher studies. Students who fell in the high income group showed higher intention of studying further in comparison to students from the low and middle income groups. The study also revealed that there is no impact of human capital (measured as father’s occupation) and man power capital (measured as family size) of the family on the career intentions of students of students of HEI’s of Uttarakhand. The study observed a significant impact of social capital of the students on their career intent. Students who had large social capital network span showed higher intentions of taking up entrepreneurship as a career. Like all studies, this study too has certain limitations which could be improved in future studies. We have used only one dimension to measure the human capital of family i.e. father’s occupation, where as we could have taken into account the occupation of mother and other family members. In addition to father’s occupation, we could have also included the parents’ educational level in order to draw more accurate results. For example Nettles & Millett (1999) used parents’ occupation & education to evaluate human capital. Similarly we have calculated only father’s annual income in order to calculate the family’s financial capital, other assets and property of the family were not taken into account. Additionally, including the income of all the family members might have given more precise results. Another area which could be further explored and bears a scholarly value is the impact of social capital of the family of student on his career choice intent.

### Competing interests

The author declares that he has no competing interests.

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