

Personality and Attitudes of Indian Young Female Workforce: Entrepreneurial Orientation by Education and Regions

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This investigation analyzes the impact of region and educational background on entrepreneurial orientation of Indian young female trainees by using four personality descriptors i. e. need for achievement, innovation, personal control, and self-esteem around three attitude components i. e. affect, behavior, and cognition. The findings reflect the highest score of the respondents on the achievement motivation as compared to the other three personality descriptors (innovation, personal control, and self-esteem) and lowest score on the self-esteem dimension. Among attitude components, cognition has emerged as highest. Entrepreneurial orientation score of the sample as a whole is moderately high and female trainees from South India are having an edge over their counterparts from North India. Significant differences are not found between females of different educational backgrounds.

Key Words: Entrepreneurial Orientation, Achievement, Attitude, Female, Self-esteem

JEL Classification: L26, M12

Introduction

Entrepreneurship is gaining increasing respect from the scholars as a field of research as well as practical application worldwide as a means to achieve wealth creation and personal fulfillment (Ma and Tan 2006). History has proven that with each economic downturn, it is the entrepreneurial drive and persistence that brings us back (Kuratko 2006). Entrepreneurship is the capacity in an individual to innovate, to bear

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Managing Global Transitions 5 (3): 229–252

risks, to foresee the prospects of the project, confidence and competence to meet unforeseen and adverse conditions. The activities of entrepreneurs are crucial to the economic growth and prosperity of modern societies. Entrepreneurship is a mindset that assigns different values to resources and opportunities than does the general population and a mindset that encourages creativity and innovation, changing the game, and being unique (Shane and Venkataraman 2000).

That's why the efforts to know more about entrepreneurs, factors influencing their decision to become entrepreneurs and their ultimate success are becoming important. So, a growing number of researches concentrate on entrepreneurship, entrepreneurship in organisations (Kundu and Rani 2004; Kuratko 2006; Garcia-Morales, Ruiz Moreno and Llorens-Montes 2006), and the impact of Globalisation on entrepreneurship (Kumar and Liu 2005). Rather, it is an issue of growing interest globally among policy makers (Diochon, Menzies, and Gasse 2005).

Entrepreneurs are examined from various perspectives, such as attitudes, backgrounds, personality traits, economic factors, contextual circumstances, and aspect of social marginality, gender, and geographical location (Beaver and Jennings 2005). But there is no unified, generally accepted definition and model of entrepreneurial activity and development.

Like men entrepreneurs, women entrepreneurs have an equal role to play in the nation's development. Women entrepreneurs seem to influence positively the economic growth and employment creation in a country and also it is a vehicle to empower women economically, socially, and politically. Women make up only 6% of India's workforce and the numbers get more skewed if we look up the corporate ladder. Though there are comparatively more working women in South India, only 5% of the senior management posts is held by them. Against this, North India has the lowest ratio of women managers (*The Times of India* 2006). Now women are earning greater numbers of business and professional degrees and entering the labor force, however these women are not reaching the top corporate management tiers (Burke and Vinnicombe 2005) and they experience differential treatment such as being offered less challenging work (Budhwar, Saini, and Bhatnagar 2005). As women receive higher relative returns for their skills in self-employment than in the wage and salary sector especially in professional and managerial areas (Moore and Buttner 1997) and report higher satisfaction from entrepreneurial

careers, it seems inevitable that some senior women managers will choose to exit corporate organisations and start their own companies (Terjesen 2005).

Personality Descriptors, Attitudes, and Entrepreneurial Orientation

For this study, the following constructs have been selected which are studied by Robinson, Stimpson, Huefner and Hunt (1991) and commonly used in dealing with business motivation (Robinson et al. 1991): need for achievement, locus of control, self-esteem, and innovation. These personality descriptors were studied around attitude components e. g. affect, behavior, and cognition (Robinson et al. 1991) to determine the EO of young female trainees. The need for achievement is based on expectation of doing something better or faster than others and better than the person's earlier accomplishments (McClelland 1961). Innovation is creating new products, methods, markets or a new organization. It relates to perceiving and acting upon business activities in new and unique ways (Drucker 1985). Perceived person control (locus of control) of business outcomes is concerned with the individual's perception of control and influence over his or her business. Internal person control leads to a positive entrepreneurial attitude (Robinson et al. 1991). Self-esteem is associated with feelings about oneself. It is an important construct of personality for researches in the workplace because perceptions of others' about self esteem may influence individuals' outcomes (Strauss 2005).

Other than personality traits, cognitive and social processes also have impact on entrepreneurial behavior. Cognitive models of attitude have been used in entrepreneurial research where attitude instruments tend to account for more of the variance in a particular set of behaviors (Ajzen and Madden 1986) than do personality dispositions or trait-based instruments. Further, a lot of studies have shifted attention to the cognitive processes and mechanisms, according to which entrepreneurs select and process information, to make sense of the external environment (Shane and Venkataraman 2000; Nicholls-Nixon, Cooper, and Woo 2000). Even though environmental resources play a role, human resources are generally found to be better predictors of outcome of the business start-up process (Rotefoss and Kolvereid 2005). Key human resources like the owner, the entrepreneur or a few other managers play the most relevant roles and their knowledge and personal characteristics relate to individ-

ual and business performance to a great extent (Herath, Herath, and Azeez 2006).

Robinson et al. (1991) argued that attitude is a better approach to predict the entrepreneurial orientation. Attitudes are developed from cognitive, affective, and behavioral information and these show moderate relationships with each another (Breckler 1984). Beliefs (the cognitive component) in combination with evaluations (the affective component) lead to attitudes. There is empirical evidence that attitudes can be predicted from beliefs and evaluations (Fishbein and Ajzen 1975). The above mentioned four personality traits are studied around attitude components (affect, behavior and cognition) to determine EO. Salient beliefs concerning self-employment determine attitudes towards self-employment, that attitude and subjective norm determine intentions to become self-employed, and that intentions to become self-employed determine actual entry into self-employment (Kolveried and Isaksen 2006). While studying EO, researchers have pursued studies on identification of factors that predict EO, identification of EO's effect on various dimensions of firm performance and the identification of variables that moderate the EO-firm performance relationship. Entrepreneurial orientation includes the processes, practices, decision-making activities that lead to new entry (Lumpkin and Dess 1996), set of personal psychological traits, values, attributes, and attitudes strongly associated with a motivation to engage in entrepreneurial activities (Hornaday and Aboud 1971). Lumpkin and Dess (1996) emphasized individuals who determine a firm's activities. Empirical research (Begley and Boyd 1987; Utsch, Rauch, Rothfuss, and Frese 1999) as well as meta-analytic results (Stewart and Roth 2001) found evidence that some components of EO (autonomy, innovativeness, competitive aggressiveness, achievement orientation, and risk-taking) were higher in samples of business founders than in samples of managers (human resources). The businesses that adopt a more entrepreneurial strategic orientation perform better (Covin, Green, and Slevin 2006). Identifying the relationship between personality characteristics and entrepreneurial orientation is important for theoretical and practical reasons.

Objectives and Importance of the Study

The main objective of the study is to assess the entrepreneurial orientation of young female trainees at Air Force Academy in India. To achieve the main objective, the study attempts to seek answers to the following questions:

1. How do young female trainees from North India and South India differ on achievement motivation, innovation, personal control, and self-esteem?
2. How do young female trainees from different educational background differ on achievement motivation, innovation, personal control, and self-esteem?
3. How do young female trainees differ on attitudinal components i. e. affect, behavior, and cognition?
4. How do education background and regions interact on four personality descriptors and attitude components?
5. How do young female trainees differ according to region and educational background on entrepreneurial orientation?

The study on Indian female entrepreneurs is not only important because of their numbers, but also because of their increasing contribution in entrepreneurial activity. The percentage of entrepreneurial activity in India is 17.9% (Male = 21.4% and Female = 14.1%), as compared to United States (Total = 10.5%, Male = 12.9%, Female = 8.1%), UK (Total = 5.4%, Male = 7.4%, Female = 3.3%), and Japan (Total = 1.8%, Male = 3.0%, Female = 0.6%). The Indian women's share in the total percentage of entrepreneurial activity is 39.4% among 29 countries participating in the 2002 Global Entrepreneurship Monitor (GEM) (Verheul, Van Stel, and Thurik 2006). Further, South Indian women are more educated and employed than North Indian women. So these two regions of India (North and South) are important for such type of studies. Other reasons of importance were:

- Human resource management, psychological aspects, corporate entrepreneurship, and the need for entrepreneurial cultures have gained greater research attention during the past few years (Kuratko 2006).
- This survey was a national level survey because the candidates were selected by pooling candidates nation-wide, covering the majority of the States of India.
- As young female trainees joined this organization (Air Force), they were ready to accept the challenges of the masculine nature of jobs, which were not routine jobs for the Indian females.
- This study was also useful for trainees as individuals because, by knowing their EAO, they can take their future career decisions.

- Trainees were studied with the aim of creating a more holistic EAO theory.

Literature Review

The existing literature concentrates on women who have already made the decision to pursue business ownership or who are already successful entrepreneurs in their field, rather than those who have the potential or intention to start a new venture (Delmar and Davidsson 2000; Fielden and Dawe 2004). Women entrepreneurs face a variety of challenges in developing and running a business and many of them remain, even after establishing and growing businesses. A number of obstacles faced by female entrepreneurs, affecting the development and growth of the firm include lack of knowledge of skills required to develop their business, acquiring appropriate training (Walker and Joyner 1999), obtaining capital (Moore and Buttner 1997), and financial planning. Women use only personal assets at start-up and employ no or minimal external funding (McClelland, Swail, Bell, and Ibbotson 2005).

Other than the above financial constraints, resistance from family (Babaeva and Chirikova 1997), cultural conditioning (Simmons 1996), gender stereotypes (McClelland et al. 2005), gender discrimination (Simmons 1996), social constraints, and discrimination put women at a disadvantage in pursuing entrepreneurial endeavors. Women acquire certain inhibitions right from their childhood which are further reinforced by parents and society (Kulkarni 2002). Women have been socialized to possess feminine traits such as warmth, kindness, selflessness, sympathy (Schein 1973) whereas men are considered to possess traits such as being aggressive, forceful, rational, competitive, decisive, strong, self-confident, and independent (Schein 1973), which are required for the managerial roles. There are also gender-role stereotypes that the workplace is the men's area as they are the bread winners, while the women's sphere is domestic responsibilities (Kang and Rowley 2005). Females appear less forceful only if you take the males' behavior as the norm (Tannen 1998).

The literature highlights various 'push' and 'pull' factors as motivators for business start-up (Alstete 2003) that push or pull women towards entrepreneurship and factors which affect the success of entrepreneurs. A study reveals that the pull of an entrepreneurial idea is the more prevalent motivation for starting a business among women and men (Mattis 2004). Women entrepreneurs rate the desire to face challenges, and self-

determination as the influencing factors, which indicates that women's entrepreneurial motivation stems from 'pull' factors rather than 'push' factors (Moore and Buttner 1997).

A number of studies have attempted to develop typologies and profiles of the women entrepreneurs (Hisrich and Brush 1986), by studying their background, education and previous experience. Some demographic characteristics of women business owners are similar to those of men, like marital status (married), age (30–45), and birth order (first born) (Watkins and Watkins 1984). In reference to education it has been observed that women have pursued undergraduate degrees in liberal arts as compared to business, engineering or technical subjects. Formal education positively affects opportunity recognition but cannot significantly discriminate between successful and unsuccessful entrepreneurial process (Davidsson and Honig 2003; Ravasi and Turati 2005). Regarding previous work experience, the literature highlights the predominance of women in the traditional sectors such as service and retail (Cooke 2005), teaching, office administration or secretarial areas rather than executive, managerial, scientific or technical positions (Watkins and Watkins 1984).

Due to socialization processes, women have different ways of thinking and different values (Cliff 1998). Women are viewed as having the skills like co-operating, nurturing, adapting, and persuading (Winn 2004) as women are mostly operating in the service industry. Generally, women are considered as less assertive, less competitive, and less aggressive in meeting the demands of business situations (Budhwar et al. 2005). They are more likely to delegate authority, more successful in dealing with clients, better customer service providers, and score more on integrity, honesty and human relations, and are more adoptive of interactive leadership styles (Budhwar et al. 2005). Neider (1987) measured locus of control in women entrepreneurs and found them to be more internally oriented. Motivation (achievement motives, independence motives, and economic necessity motives) had a significant effect on the business performance of women entrepreneurs (Lerner, Brush, and Hisrich 1995). Fagenson (1993) found that men and women who become entrepreneurs are more similar to each other in terms of values than they are to others of the same gender in other professions. Women owned businesses are said to be more innovative than men owned businesses because men tend to inherit or buy the venture while women start one more often (Gumpert 1983).

Segal, Borgia and Schoenfeld (2005) found a positive relationship be-

tween an individual's entrepreneurial self-efficiency and his or her intention to become an entrepreneur. High self-esteem individuals utilized more adaptive self-regulatory strategies than low self-esteem individuals (Baumeister, Campbell, Krueger, and Vohs 2003) and these strategies might be a factor in their higher levels of reported happiness and satisfaction (Di Paula and Campbell 2002). The esteem as a personality variable exerted a significant influence on job performance of managers (Strauss 2005). People with positive self regard performed better, tended to be more satisfied with their work and life and tended to choose the goals that have the best chance to make them happy with their work and lives (Judge, Bono, Erez, and Locke 2005).

Thus, on the basis of literature review, we propose following hypotheses:

- H1 *Female trainees have achievement motivation (orientation).*
- H1A *Female trainees of North and South India do differ on achievement motivation (orientation).*
- H1B *Female trainees of different educational backgrounds (humanities and science background) do differ on achievement motivation (orientation).*
- H2 *Female trainees have innovation orientation.*
- H2A *Female trainees of North and South India do differ on innovation orientation.*
- H2B *Female trainees of different educational backgrounds (humanities and science background) do differ on innovation orientation.*
- H3 *Female trainees have internal locus of control (personal control).*
- H3A *Female trainees of North and South India do differ on locus of control (personal control).*
- H3B *Female trainees of different educational backgrounds (humanities and science background) do differ on locus of control (personal control).*
- H4 *Female trainees have positive self-esteem.*
- H4A *Female trainees of North and South India do differ on self-esteem.*
- H4B *Female trainees of different educational backgrounds (humanities and science background) do differ on self-esteem.*
- H5 *Female trainees have positive affect.*
- H5A *Female trainees of North and South India do differ on affect.*

- H5B *Female trainees of different educational backgrounds (humanities and science background) do differ on affect.*
- H6 *Female trainees have positive behavior.*
- H6A *Female trainees of North and South India do differ on behavior.*
- H6B *Female trainees of different educational backgrounds (humanities and science background) do differ on behavior.*
- H7 *Female trainees have positive cognition.*
- H7A *Female trainees of North and South India do differ on cognition.*
- H7B *Female trainees of different educational backgrounds (humanities and science background) do differ on cognition.*
- H8 *Female trainees have overall entrepreneurial orientation (EO).*
- H8A *Overall entrepreneurial orientation (EO) differs according to regions (North and South India) of trainees.*
- H8B *Overall entrepreneurial orientation (EO) differs according to educational backgrounds (humanities and science background) of trainees.*

Research Methodology

This study is based on primary data collected from India through a questionnaire containing variables on the issue of entrepreneurial attitude and skills. The modified variables incorporated in this questionnaire were mainly picked up from the scale on entrepreneurial attitude orientation (EAO) developed by Robinson et al. (1991). In addition to 75 variables on entrepreneurial attitude orientation (EAO), seven background variables (see table 2) were also incorporated in the questionnaire. Regions (North and South India) and educational backgrounds (Humanities and Science) variables were taken as independent variables in this study. Dependent variables related to entrepreneurial attitude orientation (EAO) were divided into four main scales on the pattern of earlier study (Robinson et al. 1991) i. e. achievement motivation, innovation, personal control, and self-esteem. Each of these four main scales contained the attitude variables regarding affect, behavior, and cognition components of trainees. The dependent variables in the questionnaire were framed on a five-point scale ranging from strongly disagree (one) to strongly agree (five). Actual responses of the respondents on the variables (one to five) were considered as weights.

The sample items of all personality measures around attitude components are:

TABLE 1 Distribution of sample

Educational background	North India	South India	Total
Humanities	37	20	57
Science	21	18	39
Total	58	38	96

1. I do every job as thoroughly as possible (achievement-behaviour);
2. I spend a lot of time planning my activities (personal control-behaviour);
3. I get excited when I think of new ideas to stimulate activities (innovation-affect);
4. I believe successful people handle themselves well in gatherings (self-esteem-cognition).

Out of 550 trainees, selected through national level test and interview, of the batches of 2003–2004 at the Indian Air Force Academy, all 105 female trainees at the academy were given the survey questionnaires personally with a request to fill in the same at a single sitting. Finally, we could collect 101 questionnaires from the respondents in the time span of 15 days. Out of the collected questionnaires, five were found incomplete and the same were deleted from further processing. Finally, 96 completed questionnaires were used for analysis. This number exceeds the 91.4 per cent of the target respondents. Table 1 shows the region and educational background-wise break up of the sample.

Statistical tools such as correlations, analysis of variance (ANOVA), means, grand means, standard deviations and percentages were used for the analysis of the data gathered. The higher the mean scores of four main scales (i. e. achievement motivation, innovation, personal control, and self-esteem), the higher will be the entrepreneurial orientation (EO). A lower mean score will be indicative of lower entrepreneurial orientation (EO) i. e. more towards managerial tendency.

Results

Primary data collected from young female trainee respondents were used to assess the score on four main factors around three attitudinal components i. e. affect, behavior, and cognition. While table 1 explains the distribution of the sample, table 2 explains the characteristics of the sample around educational qualifications, education subjects, family background, work experience, aim of life, region of study (North and South),

TABLE 2 Characteristics of sample

Variables	Categories	Number	Percentage
1. Educational qualifications	Graduate	58	60.4%
	Post graduate	38	39.6%
2. Subjects	Humanities	57	59.4%
	Science	39	40.6%
3. Family backgrounds	Service	80	83.3%
	Business	16	16.7%
4. Work experience	No experience	62	64.6%
	Experience	34	35.4%
5. Aim	Executive/officer	81	84.4%
	Business person/ entrepreneur	15	15.6%
6. Region	North India	58	60.4%
	South India	38	39.6%
7. Average age	North India	58	22.66 yrs
	South India	38	22.74 yrs
	Humanities	57	22.98 yrs
	Sciences	39	22.26 yrs

and age of the respondents. Table 3 shows very interesting correlations and means and table 4 shows alpha values of the scales. Achievement is significantly correlated with personality descriptors except self-esteem. Again, achievement is having the highest correlation with cognition component ($r = 0.806$), whereas self-esteem is not significantly correlated with cognition. Innovation ($r = 0.759$) and personal control (0.710) show highest correlations with behavior component. Further innovation ($r = 0.738$) and personal control ($r = 0.604$) also show high correlations with cognition. Self-esteem is highly correlated with affect component ($r = 0.691$) and least correlated but significant with innovation and personal control. The extent of achievement level ($\bar{x} = 4.34$) is highest, and least in the case of self esteem ($\bar{x} = 3.08$) of the sample. The Alpha value of full scale was 0.80.

Table 5 showed the ANOVA results of four personality descriptors, three attitude components, and overall attitude. Achievement differed significantly according to region effect ($p \leq 0.006$), innovation differed significantly according to region effect ($p \leq 0.000$) and interaction effect ($p \leq$

TABLE 3 Inter-factor correlations, means, and sds

Factors	F1	F2	F3	F4	C1	C2	C3
F1 Achievement	—						
F2 Innovation	.584*	—					
F3 Personal control	.588*	.529*	—				
F4 Self-esteem	.114	.268*	.205*	—			
C1 Affect	.497*	.589*	.501*	.691*	—		
C2 Behavior	.656*	.759*	.710*	.449*	.536*	—	
C3 Cognition	.806*	.738*	.604*	.167	.393*	.596*	—
Mean	4.34	3.86	3.83	3.08	3.78	3.56	4.27
SD	0.308	0.300	0.355	0.433	0.310	0.297	0.301
Scale items	23	26	12	14	24	27	24

NOTE * Correlation is significant at the 0.01 level (2-tailed).

TABLE 4 Alpha values

Four factors – 75 items arranged in four personality trait groups	0.68
Three attitude components – 75 items arranged in attitude groups	0.76
Full scale – 75 items	0.80

TABLE 5 Analysis of variance of personality descriptors and attitude components

Factors	(1)	(2)	(3)
F1 Achievement	7.923 (0.006)	0.315 (0.576)	0.570 (0.452)
F2 Innovation	18.204 (0.000)	3.740 (0.056)	3.797 (0.054)
F3 Personal control	7.795 (0.006)	0.901 (0.345)	0.100 (0.753)
F4 Self-esteem	0.656 (0.420)	0.001 (0.972)	0.959 (0.330)
C1 Affect	3.019 (0.086)	0.026 (0.872)	0.220 (0.640)
C2 Behavior	20.230 (0.000)	4.223 (0.043)	3.129 (0.080)
C3 Cognition	8.666 (0.004)	1.251 (0.266)	1.101 (0.297)
EA Attitude	14.349 (0.000)	1.545 (0.217)	1.841 (0.178)

NOTES Column headings are as follows: (1) region effect (main), *F* value; (2) educational background effect (main), *F* value; (3) 2-way interaction, *F* value. Significance levels are indicated in parentheses.

0.054), personal control differed according to region effect ($p \leq 0.006$), and self-esteem did not differ on any of the effects. Further, achievement of female trainees from South India was higher ($\bar{x} = 4.44$) than from

TABLE 6 Summary of means and grand means for four descriptors and three components

Factors		North India	South India	Grand mean
F1 Achievement	Hum	4.31	4.44	4.35
	Sc	4.22	4.45	4.44
	GM	4.28	4.44	4.34
F2 Innovation	Hum	3.85	3.99	3.90
	Sc	3.63	3.99	3.80
	GM	3.77	3.99	3.86
F3 Personal Control	Hum	3.77	4.00	3.85
	Sc	3.73	3.91	3.81
	GM	3.76	3.96	3.84
F4 Self-esteem	Hum	3.09	3.08	3.09
	Sc	3.00	3.16	3.07
	GM	3.06	3.12	3.08
C1 Affect	Hum	3.74	3.82	3.77
	Sc	3.72	3.86	3.79
	GM	3.73	3.84	3.78
C2 Behaviour	Hum	3.55	3.71	3.60
	Sc	3.33	3.69	3.50
	GM	3.47	3.70	3.56
C3 Cognition	Hum	4.26	4.38	4.30
	Sc	4.12	4.37	4.24
	GM	4.21	4.37	4.27
Attitude (EO)	Hum	3.84	3.96	3.88
	Sc	3.71	3.96	3.83
	GM	3.79	3.96	3.86

North India ($\bar{x} = 4.28$). Trainees from South India again scored higher on innovation ($\bar{x} = 3.99$) and personal control ($\bar{x} = 3.96$) than trainees from North India ($\bar{x} = 3.77$) and ($\bar{x} = 3.76$), respectively. These results confirmed the H1A, H2A, and H3A. However, H1B, H2B, and H3B were not supported. On innovation dimension, female trainees from North India with science background scored least ($\bar{x} = 3.63$). On self-esteem dimension, all mean scores were least as compared to other dimensions. However, self-esteem was highest in the case of females of science back-

ground from South India ($\bar{x} = 3.16$) but significant differences were not there. So, self-esteem results did not support H4A and H4B.

Affect did not differ significantly on any of the effects. It resulted rejection of H5A and H5B. Behavior differed significantly according to region effect ($p \leq 0.000$) and educational background effect ($p \leq 0.043$), and cognition differed significantly according to region effect ($p \leq 0.004$) only. A further perusal of table 6 showed that female trainees from South India scored higher on behavior and cognition. These results supported the H6A, H6B, and H7A, but did not confirm the H7B.

In case of the overall attitude variable, region effect showed the significant difference. On overall attitude, females from South India scored higher ($\bar{x} = 3.96$) than North India ($\bar{x} = 3.79$). Overall attitude/orientation results confirmed the H8A, but did not confirm H8B.

Overall entrepreneurial orientation (EO) can be seen through table 3 and table 6. The results were derived by considering the sample as a whole ($N = 96$). The respondents scored highest orientation on achievement motivation ($\bar{x} = 4.34$) and least orientation on self-esteem ($\bar{x} = 3.08$) but positive. Further, they scored moderately high orientation on innovation factor ($\bar{x} = 3.86$) and personal control ($\bar{x} = 3.83$). On attitudinal components, the respondents scored highest orientation on cognition ($\bar{x} = 4.27$) and moderately high orientation on affect ($\bar{x} = 3.86$) and behavior ($\bar{x} = 3.56$). For bringing out the entrepreneurial orientation (EO), the overall mean score of these four main personality factors and three attitudinal components was considered. The brought out overall score ($\bar{x} = 3.86$) i. e. entrepreneurial orientation (EO) was considered moderately high/high. Hence, H1, H2, H3, H4, H5, H6, H7 and H8 were approved.

Discussion and Managerial Implications

The Entrepreneurial Orientation (EO) has been used to differentiate entrepreneurs and managers on achievement, innovation, personal control, and self-esteem (Robinson, Ahmed, Dana, Latfullin, and Smirnova 2001), and significant differences have been found on achievement, personal control, and self esteem but not on innovation. In the present study, female trainees have scored highest on the achievement motivation as compared to the other three personality descriptors (innovation, personal control, and self-esteem) and among attitude components, cognition has emerged as highest. Specifically, female trainees from South India showed relatively higher achievement orientation. Entrepreneurs

have a higher need to achieve than non-entrepreneurs. According to McClelland (1961), high need for achievement drives people to become entrepreneurs. Innovation orientation is moderately high throughout the sample and South Indian female trainees from Humanities background have scored higher. The innovative spirit is the quintessence of entrepreneurship and the most basic quality requirement of the modern enterprise system for entrepreneurs as well (Drucker 1985; Robinson et al. 1991), entrepreneurs being more creative and innovative than non-entrepreneurs are able to see things differently (Hodgetts, Luthans, and Doh 2006). Innovative culture as well as knowledge and capabilities play a critical role in the success of the entrepreneurial firm (Knight and Cavusgil 2004). Entrepreneurial behavior can add significant value and innovation is an essential aspect of this process. On the dimension of locus of control (personal control), female trainees from South India have shown higher internal personal control as compared to trainees from North India. Individuals who perceive their outcomes in life as determined by forces beyond their control such as the result of luck, fate or powerful others are considered to be externally oriented. Internals assume responsibility for their actions and accept responsibility for outcomes. Individuals with a high internal control demonstrate higher levels of achievement (Auer 1992) and are more likely to accept the responsibilities of starting and running their own businesses. Internal locus of control in that way is associated with the desire to become an entrepreneur (Bonnett and Furnham 1991) and women entrepreneurs have been found as internally oriented (Neider 1987).

Self-esteem of the female trainees is found lowest. Women have been socialized to possess feminine traits such as warmth, kindness, selflessness, sympathy (Schein 1973). They acquire certain inhibitions right from their childhood (Kulkarni 2002) and internalization of negative stereotypes may be one of the reasons for women not looking beyond basic employment and settling for less than they are capable of. Women are affected by demoralization due to their family responsibilities (Kang and Rowley 2005). Further, gender conditioning and internalized oppression causes feelings of inadequacy and self-criticism and finally low self-esteem (Simmons 1996). Gender stereotypes (Still and Timms 2000; McClelland et al. 2005) and social constraints and discrimination put women at a disadvantage in pursuing entrepreneurial endeavors (Starr and Yudkin 1996).

In this study, no difference is noticed between females of different ed-

educational background. However, female trainees are highly qualified as they are selected as officers in the Air Force. Attaining a high level of education positively influences the probability of becoming involved in the business start-up process (Delmar and Davidsson 2000). But the entrepreneur's level of education and academic studies (economics, business, and engineering) is not found to be significantly correlated with the performance of the business (Lerner, Brush, and Hisrich 1995). Further, educational background of women business owners (social sciences and/or arts) can restrict or discourage them from turning to start-up ventures in manufacturing, finance or technology and also partly explains the high concentration of women-owned businesses in the service sectors (Brush 1990). However, female aspirants (MBA students) from Marketing and International Business streams scored very high entrepreneurial orientation on the dimensions 'self-starter and leader', 'hard-worker', 'organizer' and 'social and trustworthy' than male aspirants (Kundu and Rani 2004).

Out of the four personality descriptors, achievement motivation, innovation, and personal control are moderately highly correlated with each other. Self-esteem is not significantly correlated with achievement but correlated with innovation and personal control. Other studies have drawn a strong relationship between self-esteem and locus of control (Klein and Keller 1990). Further entrepreneurs have shown a personality pattern characterized by a high need for achievement, high locus of control, and medium risk taking propensity (Korunka, Frank, Lueger, and Mugler 2003) and another study has shown that respondents with a higher degree of internal locus of control show higher levels of achievement (Auer 1992). The three components of attitude (affect, behavior, and cognition) are moderately co-related with each other. This is in tune with the results found regarding these attitude components by another study (Breckler 1984). Entrepreneurial orientation score of the sample as a whole is moderately high. Attitude (EO) differs significantly according to regions of India. A broad overview of the results shows that females from South India are having a higher entrepreneurial orientation/ attitude. It has been observed that regions with a high proportion of small firms have significantly higher new firm formation rates (Spilling 1996). This may be because of availability of entrepreneurial role models who encourage other individuals to consider business ownership.

This study does have practical implications for the younger generation of female students, professionals, organisations, and government. After

a few years, the participants of this study may face career challenge as they belong either to permanent or to short service commissions. This study may be useful for them to take their career decisions after this job i. e. bridge employment – including entrepreneurial activities (Singh and DeNoble 2003). For female students, this study is helpful in identifying their orientation towards entrepreneurship/salaried job. This may help them to decide whether they should concentrate on higher studies or should take some entrepreneurial training.

Larger organizations need to appreciate the depth of potential that exists and the revenue that can be created if it is tapped. Corporate sector and Air Force organization may use this study while making decisions regarding HRM i. e. planning, recruitment and selection, placement, training, performance appraisal, career guidance, and separation of its human resources. Further organisation can cultivate corporate entrepreneurship and make inclusive organisation by empowering women. In practice, intrapreneurship can have beneficial effects on the firm's growth and profitability, both in absolute and relative terms (Antonicic 2007). The reasons for the pursuit of corporate entrepreneurship are: (i) required changes, innovations, and improvements in the market place to avoid stagnation and decline; (ii) perceived weaknesses in the traditional methods of corporate management; (iii) turnover of innovative minded employees who are disenchanted with the bureaucratic organisations (Pinchot 1985).

For policy makers, it shows a relationship between entrepreneurial orientation and the intention to start a business. Government may identify such type of aspirants and motivate them to start new activity (self-employment) by creating favorable environment and facilities. Training and Management institutes in India provide trained manpower which makes significant contributions to establishing the pace of industrialization and accelerating socio-economic development of the country. The vast reservoir of human resources represented by the training and management institutes contains a fairly large population of potential entrepreneurs whose talents and energy must be tapped for optimum results in entrepreneurship development (Kundu and Rani 2004). Despite manifold efforts being made from different parts of the country, it appears that the entrepreneurial culture is yet to find its roots in the Indian youth community. By taking cues from this study, educators can build curriculum and development programs to encourage and empower future female entrepreneurs. Developing countries like India may use such

studies in reducing the problem of unemployment by developing and diverting the potential candidates towards self-employment.

A potential limitation of this study was that personality traits and attitudes of the female workforce were measured with the same survey at the same point in time. Thus, relationships among these constructs could be influenced by common method variance. Podsakoff and Organ (1986) recommend that researchers should at least report results from a test of single-factor hypothesis as an explanation of inter-correlation of the variables. Harman's one-factor test showed that the first factor accounted for only 13.850% of the covariance among measures (Podsakoff, MacKenzie, Lee, and Podsakoff 2003; Podsakoff and Organ 1986), suggesting that common method variance is not a severe issue.

While this research was limited to a small sample, the findings are nevertheless important because of the nation-wide distribution of the sample. This research may provide a useful insight into the changing perception of young females despite the effects of different stereotypes and gender discrimination in the working environment. Special counseling and training programs may be useful for developing females to come out from the age old stereotypes, social barriers, and to enhance their self-esteem. Further, only four personality traits were included in this study, whereas more traits could have been included to give a comprehensive view about the objective. Despite this, these four traits i. e. achievement motivation, personal control, innovation, and self esteem around three attitude components, could give very interesting and applicable results.

In order to obtain better results, the study may be extended by including more personality traits, more background criteria including intentions, variety of female respondents, and larger survey. Extended researches may also be conducted on comparative analysis of potential and existing women entrepreneurs on different personality and attitude dimensions across cultures.

Conclusion

In addition to the measurement of overall entrepreneurial orientation of young females, the study has analyzed the impact of region and educational background on entrepreneurial orientation. The findings reflect the highest score of the respondents on the achievement motivation as compared to the other three personality descriptors (innovation, personal control, and self-esteem) and lowest score on the self-

esteem dimension. Among attitude components, cognition has emerged as highest. Entrepreneurial orientation score of the sample as a whole is moderately high, and young female trainees from South India have the edge over their counterparts from North India. Significant differences are not found between females from different educational backgrounds.

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