

Entrepreneurial inclinations of prospective teachers

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Abstract

Background: Entrepreneurship has become an emerging field of research in America, Europe and Asia. It has contributed a lot in uplifting the socioeconomic status of the countries. Well reputed International Journals are widely publishing on a variety of entrepreneurial issues. A little research in the area has so far been reported from Pakistan.

Aims: This research explored entrepreneurial inclinations of prospective teachers in Pakistan.

Sample: Multistage sampling was employed to get the replica of the population. Seven hundred master of education students (prospective teachers) were randomly selected from seven Pakistani public universities.

Method: Survey method was used to collect data from the sample. Five hundred and sixteen respondents completed the questionnaire. From factor analysis, three factors emerged: entrepreneurial intent and acceptability, entrepreneurial effort and entrepreneurial motivation. Perceptions on the conceptual variables of locus of control, self-efficacy, subjective norms, instrumental readiness and entrepreneurial intentions were also derived.

Results: The majority of prospective teachers were found to be positive towards entrepreneurship at all seven universities.

Conclusion: Most of the prospective teachers were positively inclined towards entrepreneurship. There was some impact of demographic variables such as university and course attended, parental level of education and gender. Females exhibited a higher entrepreneurial profile (in terms of working hard and entrepreneurial motivation) at most of the universities. The implications for practice and policy are discussed.

Keywords: entrepreneurial inclinations, prospective teachers, teacher training

未來教師的經商意圖

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摘要

背景：在歐美國家，經商是一個非常重要的研究領域，然而在一些亞洲國家，研究經營企業才剛剛起步。至今為止，巴基斯坦在這一領域的研究報告還是屈指可數。研究經商會對提高整個國家的經濟社會氣候起相當大的作用。

目標：這份研究報告探討了巴基斯坦未來教師的經商意圖。

對象抽樣：我們採取了多階段的抽樣方法來選取研究對象。從七所巴基斯坦公立大學中，我們隨機選取了七百個教育系碩士學生（未來教師）作為此項研究的對象。

方法：我們採用了問卷調查法來收集信息數據。五百十六位研究對象回答了問卷調查表。通過對數據的因素分析法，我們發現了三個主要因素：經商意圖和經商可接受性，經商所花費的精力和經商動機。我們同時也探索了一些概念層的因素，比如：自我控制性，自我效能，主觀標準，經商準備狀態和經商目的。

結果：七所大學中的絕大多數未來教師對經商持樂觀態度。一些和個人相關的因素影響了人們對經商的看法。比如：不同的大學或不同的專業，父母的教育程度和研究對象的性別。大部分大學中的女性研究對象在勤奮工作和經商動機方面高於男性。

結論：大部份未來教師對經商持看好態度。我們同時也探討了經商的不同看法對實際經商和政策制度的影響。

關鍵詞：經商意圖、未來教師、教師培訓

Introduction

Entrepreneurs are imperative for socioeconomic development, job creation and poverty alleviation (Blenker, Dreisler and Kjeldsen, 2006; Haftendorn and Salzano, 2003; Isaacs, Visser and Brijlal, 2007). They cause prosperity to nations. The existing literature indicates that education contributes a lot in developing entrepreneurs (Dickson, Solomon and Weaver, 2008; Edelman, Monolova and Brush, 2008). An education system nurtures creative thinking, questioning behaviour, independence and self-reliance - essential skills and attitudes that make up an entrepreneurial mindset (Haftendorn and Salzano, 2003).

In education the teacher motivates and helps the students to become entrepreneurs (Haftendorn and Salzano, 2003; Stoltenberg's 2nd Government Ministries, 2008; Hays, 2006; Twaalfhoven and Wilson, 2004; Der Kuip and Verheul, 2003; Lesko, 2006; Oral, 2006; The National Foundation for Teaching Entrepreneurship, 2008). S/he fuels the entrepreneurial potential of students by: (1) stimulating the development of entrepreneurial ideas, (2) supporting start-up teams in learning venturing skills by providing advice, coaching, and training, (3) co-ordinating obtaining access to resources and developing social capital by creating a collaborative network, (4) setting clear and supportive rules and procedures to regulate the university spin-off process, and (5) shaping a university culture that reinforces students' entrepreneurship by creating norms and exemplars that motivate entrepreneurial behaviour (Van Burg, Romme, Gilsing and Reymen, 2008).

An entrepreneurial teacher focuses more on coaching than ordinary classroom teaching (Blenker, Dreisler and Kjeldsen, 2006). S/he keeps a close eye

on students' learning during project work and acts as role model, consultant, obstetrician, trader and chameleon (Fiet, 2000). Consequently the teacher prepares the students for an enterprise. Hence, an entrepreneurially inclined the teacher is vital for the implementation of enterprise education (Choudhary, Myers, Nystrom and Gokhale, 2007; Isaacs and Visser and Brijlal, 2007).

The University of Southampton concluded that the professional development of the teacher is an essential part of the development of enterprising activities in schools (Haftendorn and Salzano, 2003). An entrepreneurial teacher needs specific learning skills in four major areas: a) the classroom, b) managing projects, c) understanding the learning process and d) negotiating and involving colleagues (Haftendorn and Salzano, 2003). So, there is an urgent need to develop the entrepreneurial potential of teachers (Birdthistle, Hynes and Fleming, 2007; Henderson and Robertson, 2000 and Lesko, 2006). This article explores the entrepreneurial inclinations of prospective teachers in Pakistan.

Background in Pakistan

The present socioeconomic scenario in Pakistan shows the gap between the rich and poor has widened in recent years. The percentage of the population below the poverty line (Rupees (Rs) 944.47) stands at 22.32 percent (Khan, 2008). At the moment Pakistan is passing through a serious socioeconomic crisis. According to the economic survey for 2007-08, there were failures in major areas, particularly GDP growth rate, agriculture, overall manufacturing, large scale manufacturing, inflation, fiscal policy, exports, imports, current account deficit and trade balance. The Pakistan economy grew by 5.8% against

the original target of 7.2%. The average per capita income of US \$1085 was still 27 times lower than the UK. Food inflation was estimated at 15% (Haq, 2008). A 4.7% deficit in the GDP (459 billion Rs) has been shown in the 2008-09 budget estimates (Qamar, 2008).

Only half of one percent of the GDP is being spent on universities. Public spending per student (about US\$670) remains well below the average found in developing countries (Government of Pakistan, 2006 and Higher Education Commission, Pakistan, 2008a). In this state of affairs there is a high demand for Pakistani institutions to promote a culture of entrepreneurship among students, faculty and staff (Mian, 2006). At present none of the teacher training institutions in the country offers an independent course on entrepreneurship. However, University of the Punjab Lahore, the University of Sindh Hyderabad and Bahauddin Zakariya University Multan offer either a compulsory or an elective entrepreneurship course unit to their masters level business students (Higher Education Commission, 2008b). Only two PhD studies on entrepreneurship have so far been reported by the Higher Education Commission, to the credit of Bahauddin Zakariya University Multan (Higher Education Commission, 2008c).

It was noted by Hussain (2008) that most of the entrepreneurs in Pakistan lack analytical skills, problem solving abilities, critical thinking, ability to apply knowledge acquired, self efficacy and risk taking propensity. Eighty five percent of females do not participate in entrepreneurial activities (Hussain, 2008). No other work on entrepreneurial inclinations has so far been reported from Pakistan. The non existence of virtual information has emerged as a major problem in developing the field (Bhutta, Rana

and Asad 2008).

Now entrepreneurial thinking is on the rise among policy makers. The role of universities in developing the national economy is being redefined. The policy making agencies like the Higher Education Commission is taking keen interest to involve the high seats of learning in promoting entrepreneurial culture in the state (Rehman, 2008). Primarily these institutions are being charged with the responsibility of developing entrepreneurial attitudes among all the stakeholders of the universities. This article fills the gap in existing literature on the entrepreneurial inclinations of prospective teachers in the Pakistan.

Methodology

Sampling

Multistage sampling was employed to select the sample. In 2007, there were 111 universities and degree-awarding institutions in Pakistan in the public and private sectors (Higher Education Commission, 2008d). The Task Force report (2002) noted that 85% of university students (126193learners) were enrolled in 47 public sector institutions. Therefore, public sector universities were targeted. Among the various types of public sector universities, the 20 general universities (rather than those specialising in particular subjects) represented the largest group of population, and these were focused upon. Then the universities having teacher training departments established before the development of Higher Education Commission were identified. To maximize the representation of population in sample, seven universities from all over Pakistan (three from Punjab, two from Sindh and one each from Baluchistan and North West Frontier Provinces) were picked by exercising stratified random sampling. Subsequently the strata of education departments

were identified from the sample universities. One hundred students were randomly drawn from each of the selected departments. The consequent sample consisted of 700 students.

Questionnaire

A number of sample questionnaires regarding entrepreneurial inclinations of prospective teachers were downloaded or received from colleagues (mainly from US, Germany, Spain, China and Malaysia). From consideration of these possibilities, a 45 item questionnaire was developed, featuring an 8-point Likert scale for responses. It was mainly adapted from the Ramayah and Harren (2005) 7-point agree-disagree Likert type scale for assessing entrepreneurial intention among the potential entrepreneurs of University Sains Malaysia. This scale was largely concerned with need for achievement, locus of control, self efficacy, instrumental readiness, subjective norms and entrepreneurial intentions. The reported reliability value for the scale was 0.85.

The language and content of the items were adapted. Another modification was the change to an eight point Likert scale. The scale points one and eight were labelled respectively with strongly disagree and strongly agree options while the intermediate points were left uncharacterized. According to Boone (1997), the tendency to pick the neutral response in such inventories is more common in Asian cultures - the neutral option was therefore eliminated. The questionnaire was then translated into Urdu.

Two experts were requested to consider the content validity and face validity of the instruments in both the languages. Items obtaining approval from both experts were retained. Inappropriate items were revised. The final questionnaire consisted of

45 items. These deal with five conceptual variables: self-efficacy (item numbers 7,16,17,22,24,26,27,28, 31,32,33,36,37,40), entrepreneurial intentions (item numbers 15,20,21,23,25,26,29,34,35,38), locus of control (item numbers 8,10,12,13,30), subjective norms (5,6,9,11) and instrumental readiness (14,18,19,39). The questionnaire was then piloted on a sample of 20 prospective teachers. This led to some further adaptations. The Urdu and the English versions of the questionnaire were subsequently used together for data collection. Cronbach alpha of .814 indicated high reliability.

Definitions of the Conceptual Variables

Entrepreneurial Inclinations

It is the tendency of prospective teachers to pursue an entrepreneurial career.

Locus of Control

It is a personality trait that relates to the generalized expectations of a person on whether he/she will be able to control the events in life (Leone and Burns, 2000).

Entrepreneurial Motivation

It is the energy that forces the person to struggle for success and perfection (Sagie and Elizur, 1999).

Self efficacy

It is the self assurance of the individuals to complete the challenging tasks.

Entrepreneurial Intentions

It is the individual goal for considering an entrepreneurial career in future.

Instrumental Readiness

Instrumental readiness involves available support from family and friends and access to capital to take start as an entrepreneur.

Subjective Norms

It is the status that entrepreneurs enjoy in Pakistan.

Response Rate and Analysis

The questionnaire was distributed among one hundred prospective teachers from each of the seven departments contacted. Participation was voluntary. The return rate varied from university to university. A total of 516 prospective teachers responded within the scheduled period of two months. The overall response rate was 73%. Sixty four percent of the respondents were females, reflecting the larger number of females in departments of Education at university in Pakistan.

The data were analyzed in three steps. In the first step, a factor analysis was conducted. In the second step, descriptive statistical techniques were applied to the data. Where discrepancies seemed large, inferential statistical analysis was applied. Thirdly, perceptions on the conceptual variables of locus of control, self efficacy, subjective norms, instrumental readiness and entrepreneurial intentions were analyzed.

Results

Factor Analysis

A Principal Components Analysis followed by Varimax rotation was conducted to identify the underlying factors of entrepreneurial inclinations in prospective teachers. A high value of Kaiser Mayer-Olkin Measure of Sampling Adequacy (.82), highly significant Bartlett Test of Sphericity (Chi Square 1982.526; Significance $p < 0.000$) and less than .1 value of the Anti-image correlation indicate that the data exhibited normal behaviour and are interpretable. A three-factor solution was accepted for the data set. This accounted for 50.956% of the common variance. The five (18,19,24,25,34), six (26,27,30,31,32,35) and four (13,21,33,38) items, loaded respectively on entrepreneurial intent and acceptability, entrepreneurial effort, and entrepreneurial motivation (see Table 1).

Table 1: Factor Matrix of Entrepreneurial Inclinations of Prospective Teachers

Factor No.	Attitudes	Q. No	Items	Factor Loadings	Variance Explained
1	Entrepreneurial Intent and Accessibility	18	I have access to capital to start being an entrepreneur	.578	18.309%
		19	I believe that people who are important to me think that I should pursue a career as an entrepreneur	.765	
		24	I am generally happy with the status quo	.580	
		25	I would prefer to have my own successful business than to be in a secure and well paid job	.598	
		34	I have seriously considered starting my own business sometimes after graduate	.749	

2	Entrepreneurial Effort	26	I feel that the risks and insecurities associated with being in business are acceptable	.642	18.200%
		27	I closely monitor areas where I know I need more practice	.599	
		30	There is a direct connection between how hard I study and the grades I get	.648	
		31	I set goals for myself in order to direct my activities	.794	
		32	Working hard is something I like doing	.620	
		35	I would seriously consider starting my own business if I could be taught how to do it	.549	
3	Entrepreneurial Motivation	13	When I make plans, I am almost certain that I can make them work	.666	14.446%
		21	It is important to teach students about entrepreneurship and starting a business	.621	
		33	When confronted with a problem I can usually find several solutions	.654	
		38	Running my own business would be more prestigious than working for others	.572	
Total Variance Explained					50.956%

Rotation Varimax

Kaiser-Meyer-Olkin Measure of Sampling Adequacy	.829
Bartlett Test of Sphericity	1982.526
df	105
Sig.	.000
Convergent Validity in the entire individual subscales	100%
Overall Convergent validity	87.254%
Overall Discriminant Validity	12.745%
Anti Image Correlation	Less than -.1

The measuring instrument had more than 80% content validity. The convergent validity was 87.25. Discriminant validity was 12.74%, a satisfactorily low figure. Reliability of the scale was .814. The reliability of the subscales entrepreneurial

intent and acceptability, entrepreneurial effort and entrepreneurial motivation were .809, .786 and .748 respectively.

Descriptive and Statistical Analysis

The opinion of prospective teachers on entrepreneurial intent and acceptability, entrepreneurial effort and entrepreneurial motivation were weighted according to the position in which responses occurred (e.g. a response of 8 was considered as 8, not as 1, and so forth), summed by adding the resultant frequency of items under each subscale and calculating the agree, partially agree, partially disagree and disagree frequencies. Responses from

1-2 and 3-4 points were taken to indicate the disagree and partially disagree categories; whereas responses from 5-6 and 7-8 points were treated as partially agree and agree perceptions.

The prospective teachers' entrepreneurial inclinations on each factor were determined. Then the overall entrepreneurial inclinations were calculated. The effects of the demographic variables were also analysed.

Table 2: Entrepreneurial Inclinations of Prospective Teachers

Factors	Agree %	Partially Agree %	Partially Disagree %	Disagree %	Total Frequency
Entrepreneurial Intent and Acceptability	54.57%	26.84%	12.80%	5.62%	13069
Entrepreneurial Effort	64.33%	25.34%	7.71%	2.60%	18229
Entrepreneurial Motivation	56.27%	26.96%	11.40%	4.45%	10979
Overall Entrepreneurial Attributes	58.39%	26.38%	10.63%	4.22%	422770

Fifty five percent responses indicated moderately high entrepreneurial intent and acceptability among the prospective teachers. Regarding entrepreneurial effort 64% of responses revealed that two thirds of the prospective teachers were working hard to achieve entrepreneurial careers at some time in future. More than half of the prospective teachers were found at the higher level of entrepreneurial motivation, as reflected in 56% responses. Fifty eight percent of responses gave indications of fairly high positive attitudes. Regarding demographic variables, M.A. students exhibited more access to capital for starting an entrepreneurial career and higher entrepreneurial preference than their colleagues from B.Ed. classes [(Access to capital, M.A. Education Final-B.Ed.,

Mean difference .90864, F 2.539, df 501, Sig. .045), (Preference for entrepreneurship, M.A. Education Previous-B.Ed., Mean difference 1.08029, F 4.172, df 502, Sig. .008), (Possibility of joining entrepreneurial career, M.A. Education Final-B.Ed., Mean difference 1.10508, F 5.292, df 502, Sig. .003)].

University had a significant impact on entrepreneurial intent and acceptability. According to the data the prospective teachers at University A and F indicated a higher possibility of having access to capital than those at the respective Universities C, G and C,G and E. The people the prospective teachers valued more in their life at Universities A and F exposed a stronger wish for them to be entrepreneurs than their colleagues at Universities B and B, D and

G. Prospective teachers from universities E and F were found more concerned for starting business sometime after graduation than their colleagues at universities B, C and D.

Prospective teachers who had low qualified fathers revealed higher prospects for entrepreneurial careers than those whose fathers were highly qualified. Regarding entrepreneurial preference a similar trend was observed in the case of mothers' qualification. The people who the prospective teachers of income group Rs 10000-20000 value more in their life exposed a stronger entrepreneurial wish for them than those in the respective higher income group. Prospective teachers with Rs 6000-10000 and Rs 10000-20000 monthly income were found more serious in starting business than their counterparts in Rs 30000-40000 monthly income group. There was no significant effect of gender, residence or fathers' occupation on entrepreneurial intent and acceptability.

Female prospective teachers exhibited a firmer belief in the direct relationship between working hard and achievement of grades than their male counterparts (Male mean 6.2283, Female Mean 6.66949, $t = -2.843$, $df = 513$, $Sig. = .005$). Similarly the prospective teachers of M.Ed. classes indicated a greater probability towards working hard than their colleagues in M.A. final year classes (M.Ed-M.A. Education Final, Mean difference .72526, $F = 5.806$, $df = 501$, $Sig. = .038$).

Prospective teachers from University A were found higher in risk taking, self assessment, internal locus of control, setting goals and working hard than their classmates at Universities C, D, F and G. Similar trends were observed between Universities E and C, E and F, G and F, B and F, B and G on entrepreneurial effort.

Prospective teachers whose mothers were either illiterate or had primary/ higher secondary level education revealed higher entrepreneurial effort than those having mothers with secondary and other types of qualifications. Entrepreneurial effort was also higher among prospective teachers whose fathers were either retired or in government job or associated with entrepreneurial professions, as compared to those whose fathers were in private employment. There was no significant effect of residence, fathers' education and income on entrepreneurial effort.

Female prospective teachers were at a higher motivation level than their male counterparts (Male Mean 4.6783, Female Mean 5.2048, $t = -2.509$, $df = 514$, $Sig. = .012$). Prospective teachers at Universities A, B, C, D and F had higher entrepreneurial motivation than their colleagues at Universities E and G. Prospective teachers whose father had higher secondary level education showed higher entrepreneurial motivation than those with either illiterate or primary education fathers. Prospective teachers whose fathers were either retired or entrepreneurs had higher entrepreneurial motivation than those whose fathers were employed in either the private or public sector. There was no significant impact of residence, class, mothers' education and fathers' income on entrepreneurial motivation.

Conceptual Variable: Locus of Control

Five items related to locus of control. The first two questions were couched in a negative form (positive response indicating low locus of control), and yet there were positive responses to these two items. The other three items were couched in a

positive form (positive response indicating high locus of control), and there were positive responses to these three items. The overall picture was thus of a generally positive response in locus of control.

Table 3: Locus of Control in Prospective Teachers

Item #	Items	Agree %	Partially Agree %	Partially Disagree %	Disagree %	Total Frequency
8	Sometimes I feel that I don't have enough control over the direction my life is taking	46%	30.93%	14.77%	8.29%	2302
10	My misfortune results from the mistakes I make	43.16%	25.44%	18.56%	12.82%	2020
12	In my case getting what I want has nothing to do with luck	44.77%	35.46%	12.94%	6.80%	2394
13	When I make plans, I am almost certain that I can make them work	58.33%	26.54%	11.31%	3.80%	2857
30	There is a direct connection between how hard I study and the grades I get	75.14%	19.21%	3.79%	1.54%	3372
Overall Locus of Control		55.64%	26.89%	11.40%	5.98%	12925

Forty six percent of responses revealed that nearly 50% prospective teachers did not have enough control over the direction of their life. For 43% of responses the respondents believed that their misfortune depended on their mistakes. Regarding the role of luck in success 45% of responses on

the agree side revealed no interference of fortune with the achievement. More than 58% of responses reflected a high certainty level among prospective teachers to accomplish their plans and 75% revealed a direct link between the successes and hard work of the participants. Fifty six percent of respondents exhibited an internal locus of control.

Self-efficacy

Fourteen items related to self-efficacy (Table 4). All the questions were couched in a positive form (positive response indicating high self-efficacy).

Table 4
Self-efficacy Level of Prospective Teachers

Item #	Items	Agree %	Partially Agree%	Partially Disagree %	Disagree %	Total Frequency
7	I am good at handling unforeseen situations	43.79%	33.81%	16.76%	5.62%	2434
16	I prefer a logical approach in decision-making	39.59%	36.72%	17.53%	6.14%	2407
17	I am more efficient because I do more work in less time	46.30%	28.14%	18.15%	7.39%	2352
22	I remain calm when facing difficulties	48.14%	27.03%	17.45%	7.36%	2349
24	I am generally happy with the status quo	50.47%	32.05%	11.96%	5.50%	2633
26	I feel that the risks and insecurities associated with being in business are acceptable	65.07%	22.97%	8.27%	3.67%	2938
27	I closely monitor areas where I know I need more practice	56.51%	30.76%	9.00%	3.70%	2886
28	I like to take calculated risks with new ideas	56.89%	28.26%	10.39%	4.44%	2742
31	I set goals for myself in order to direct my activities	65.59%	21.30%	8.47%	1.62%	3149
32	Working hard is something I like doing	58.63%	28.32%	9.76%	3.27%	2867
33	When confronted with a problem I can usually find several solutions	49.09%	32.52%	12.16%	6.21%	2589
36	I like the opportunity to come up with innovative solutions to problems	61.78%	27.26%	9.37%	1.57%	2923
37	When working in group I prefer being a leader rather than a follower	57.99%	24.88%	10.21%	4.16%	2909
40	I look forward to return to work when I am away from my work	48.19%	29.06%	19.80%	2.94%	1803
Overall Self efficacy		54.47%	28.50%	12.33%	4.38%	36981

On the basis of more than 60% of perceptions one can infer that about two thirds of the prospective teachers are ready to accept business related risks, set goals to direct their activities and like problem solving opportunities. More than 56% of responses indicate that a fairly high number of respondents identify their weaknesses through self evaluation, such as be a leader in group work and seem ready for hard work. However, 50% of responses exposed the leaning of half of prospective teachers towards status quo situations. As a whole 54% responses indicated high level entrepreneurial self-efficacy among the prospective teachers.

Instrumental Readiness

Four items related to instrumental readiness (Table 5). All the questions were couched in a positive form (positive response indicating high instrumental readiness). There were positive responses to these four items.

Table 5
Instrumental Readiness of Prospective Teachers

Item #	Items	Agree %	Partially Agree %	Partially Disagree %	Disagree %	Total Frequency
14	I have access to supporting information to start being an entrepreneur	49.05%	23.12%	14.84%	5.97%	2493
18	I have access to capital to start being an entrepreneur	49.25%	29.05%	14.07%	7.61%	2402
19	I believe that people who are important to me think that I should pursue a career as an entrepreneur	56.41%	28.36%	11.08%	4.14%	2581
39	I have good social networks that can be utilized when I decide to be an entrepreneur	50.61%	25.69%	18.75%	4.93%	2592
Overall Instrumental Readiness		51.39%	28.27%	14.70%	5.63%	10068

About 50% of perceptions showed that the half of the prospective teachers had access to capital and supporting information necessary for entrepreneurial activity. Fifty one percent of responses revealed that more than half of the prospective teachers have access to social networks that can be

useful for some future entrepreneurial activity. For fifty six percent of perceptions important people of participants' believed that they should pursue a career as an entrepreneur. Fifty one percent of perceptions reflected positive instrumental readiness.

Subjective Norms

Four items related to subjective norms (Table 6). All questions were couched in a positive form (positive response indicating high subjective norms), and there were positive responses to all items.

Entrepreneurial Intentions

Ten items related to entrepreneurial intention (Table 7). All questions were couched in a positive form (positive response indicating high entrepreneurial intention), and there were positive responses to these items.

Table 6
Subjective Norms of Prospective Teachers

Item #	Items	Agree %	Partially Agree%	Partially Disagree%	Disagree %	Total Frequency
5	I believe that my closest friends think that I should pursue a career as an entrepreneur	41.96%	31.17%	15.87%	10.97%	2104
6	I do not care what people who are important to me think if I decide to be an entrepreneur	43.15%	34.66%	14.80%	7.37%	2331
9	I believe that my closest family thinks that I should pursue a career as an entrepreneur	43.69%	29.63%	17.12%	9.78%	2126
11	I do not care what my closest friends think if I decide to be an entrepreneur	45.67%	27.44%	16.73%	10.14%	2139
Overall Subjective Norms		43.64%	30.83%	16.11%	9.52%	8695

In more than 41% of cases, closest family and friends wanted the prospective teachers to be an entrepreneur. Prospective teachers did not care about the desires of their closest family and friends in adopting entrepreneurship, as revealed 43% of responses. As a whole 43% of prospective teachers indicated positive subjective norms for entrepreneurship.

Table 7
Entrepreneurial Intention of Prospective Teachers

Item #	Items	Agree %	Partially Agree%	Partially Disagree%	Disagree %	Total Frequency
15	I would prefer to be self-employed and independent, rather than work for others	51.87%	31.33%	12.81%	3.97%	2716
20	I would seriously consider starting my own business if I can't find a job	62.69%	24.26%	8.69%	3.99%	2831
21	It is important to teach students about entrepreneurship and starting a business	60.38%	21.13%	14.65%	3.81%	2777
23	I am likely to make more money running my own business than working for others	56.79%	23.31%	15.22%	4.66%	2574
25	I would prefer to have my own successful business than to be in a secure and well paid job	63.09%	19.77%	13.19%	4.23%	2788
26	I feel that the risks and insecurities associated with being in business are acceptable	65.07%	22.97%	8.27%	2.34%	2938
29	A comprehensive unit on how to run a business would be a useful course for me	71.04%	19.89%	6.84%	2.20%	3126
34	I have seriously considered starting my own business sometimes after graduate	53.52%	27.08%	13.98%	5.41%	2625
35	I would seriously consider starting my own business if I could be taught how to do it	59.84%	30.55%	7.55%	3.76%	3031
38	Running my own business would be more prestigious than working for others	56.73%	28.02%	11.13%	4.10%	2776
Overall Entrepreneurial Intention		60.35%	24.80%	11.08%	3.76%	28182

In more than 51% cases the participants exhibited business preference as a future career choice. They wanted to earn more money through this option, were willing to attend entrepreneurial courses and considered it more prestigious than any other activity. More than 60% perceptions revealed high entrepreneurial training course demands on university departments. The prospective teachers were found at

a high level of entrepreneurial intention, as indicated by 60% perceptions.

Overall Entrepreneurial Attitude

The overall entrepreneurial attitude consists of the combined effect of all the conceptual variables (see table 8).

Table 8
Entrepreneurial Inclinations of Prospective Teachers

Attributes	Agree %	Partially Agree%	Partially Disagree%	Disagree %	Total Frequency
Locus of control	55.64%	26.89%	11.40%	5.98%	12925
Self efficacy	54.47%	28.50%	12.33%	4.38%	36981
Instrumental Readiness	51.39%	28.27%	14.70%	5.63%	10068
Subjective Norms	43.64%	30.83%	16.11%	9.52%	8695
Entrepreneurial Intentions	60.35%	24.80%	11.08%	3.76%	28182
Overall Entrepreneurial Attributes	53.09%	27.85%	13.12%	5.85%	96851

Fifty six percent of perceptions revealed an internal locus of control, whereas 54% of perceptions evidenced a high level of entrepreneurial self-efficacy. In more than 51% of cases instrumental readiness was found favourable by potential entrepreneurs. Forty-four percent of responses depicted a positive situation of entrepreneurial norms. As a whole, 53% of responses gave a strong indication of positive entrepreneurial attitude of the prospective teachers.

Discussion and Conclusions

Prospective teachers at all the universities indicated moderately higher entrepreneurial intent and acceptability. There was significant impact of parents' occupation on entrepreneurial intent and acceptability at two universities. Prospective teachers whose fathers were retired were found higher on entrepreneurial intent and acceptability than those having fathers employed in public sector. Prospective teachers of rural areas in three universities showed higher entrepreneurial intent and acceptability than their urban counterparts. At one university prospective teachers whose fathers and mothers had higher qualifications indicated higher entrepreneurial intent and acceptability. Prospective teachers of M.A. Education final and M.Ed. classes were found higher at entrepreneurial intent and acceptability than their

colleagues from B.Ed. classes showing some impact of qualification on entrepreneurship. Gender and income did not show any significant impact on this variable.

The female prospective teachers at two universities were found higher on entrepreneurial effort than their male colleagues. At one university prospective teachers from rural areas showed higher entrepreneurial effort than their colleagues in urban areas. There was no significant effect of class on entrepreneurial effort.

The overall demographic picture indicated that the prospective teachers of M.A Education classes were more positive in terms of access to capital and starting as entrepreneurs than their B.Ed. colleagues. Important people to prospective teachers of two universities had a stronger entrepreneurial wish than those at three others. However, prospective teachers at two universities revealed higher possibilities of starting as entrepreneurs than colleagues at three other universities. The low qualified, low income and public employment, retired or entrepreneurial related parents' group of prospective teachers had a higher entrepreneurial wish, motivation and effort than their counterparts in the high income, higher qualified and private sector employed parents group. The female and M.Ed. class respondents showed more hardworking tendencies and high motivation levels.

The generally positive results are encouraging. There was partial impact from the demographic variables (gender, residence, parents' qualification, class and occupation). The other public sector universities in the country have a similar type of academic culture. Therefore, we might think to generalize these results to all general public universities in Pakistan. In some cases the responses reflected weak entrepreneurial inclinations of prospective teachers. Somewhat strangely, this was true of subjective norms and instrumental readiness but the overall picture here was positive. The results suggested that self-efficacy, entrepreneurial intention, locus of control, instrumental readiness and subjective norms were important personal factors in entrepreneurial development, in that order of importance. To what extent this is translated into later behaviour is of course another question, for future research. This is the first study of its nature in the country, so further investigation should bring more clarification in the field.

Action Implications

The study fills the gap in the existing literature on entrepreneurial inclinations of prospective teachers in Pakistan. In terms of new contribution to knowledge it is emphasized that this is first paper out of Pakistan. The findings might not be new in the world but they are new for Pakistan. This piece of research might stimulate further research work in the field. The measuring instrument used here could help future investigators. The findings of the study also provide some guidelines for making future decisions. One of the significant findings indicated that respondents in all universities showed high demand for an independent course on entrepreneurship.

This demands serious consideration, by university authorities and government. Some entrepreneurial contents (idea generation, opportunity evaluation, business planning, raising and leveraging resources and strategies to help a young business grow) can be included in the curriculum of teacher training programmes. These courses mainly focus on negotiation, sales and observation skills, rather than how best to help students learn entrepreneurship concepts and to develop their skills (Stoltenberg's 2nd Government Ministries, 2008). Possibly Pakistan can boost its economy through entrepreneurial promotion. Potential entrepreneurs if properly trained can play a leading role in this regard.

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