

# Social Capital as a Determinant of Individuals' Entrepreneurial Intention

Rabeeya Raof, Naheed Sultana, and Javeria Sattar

**Abstract**—The entrepreneurial activity is very essential in the economic stability of any country. The rate of the entrepreneurial activity is high in developed countries but it is still lower in the developing nations. The research has shown that individuals' entrepreneurial behavior primarily depends upon the entrepreneurial intention (EI). Moreover, Global entrepreneurship monitor (GEM) report affirmed that entrepreneurial intentions of individuals in developing countries is low. Thus it is a research question that how EIs can be raised in developing countries. To address this question, current research study was conducted to examine the effect of social capital on the EI through the mediation of social norms prevailing in the developing country like Pakistan. Data were collected from the business management students of the 4 largest universities of Pakistan. For analysis, structural equation modeling test is used. This study reveals the effect of social capital on EIs in the context of developing country like Pakistan. The novelty of this study is the effect of social capital is not studied earlier in the developing countries and it's kind of first study in this nature which explores these factors and differentiated from the existing literature of developed countries.<sup>1</sup>

**Index Terms**—Social capital, social norms, entrepreneurial intention, developing countries.

## I. INTRODUCTION

A person who eagerly take initiatives and the full responsibility for that initiative with the ability to create uniqueness and open to risk associated with this process, is named as an entrepreneur. The entrepreneurs are also found persisted to their goals, even though they face many challenges in their way of taking initiatives [1]. This entrepreneurial activity is the key driver of economic development [2]. The correlation between the entrepreneurial activity of the population, small business, and the economic development of the state has been confirmed in numerous studies [3], [4]. The foremost step in the process of entrepreneurship is Entrepreneurial intentions (EIs) [5]. Which imitates the readiness of a person to initiate a new venture [6] and can be defined as "intention to start a business" [7]. In line with the literature pertaining to entrepreneurship, the literature pertaining to EI is crowded with many definitions [8]. While Kolvereid [9] perceived that the individuals' intent to be self-employed as EI, whereas Krueger Jr and Brazeal [10] viewed EI as the intent of the individual to launch a new venture. This phenomenon was first presented by Ajzen who also emphasized on the

leading role of intention in understanding the human behaviors [11], [12]. So while being the key factor in determining the human behavior positive intentions for entrepreneurial ventures could influence the venture creation.

Enormous studies demonstrate that the social capital of an individual is linked with the success of his business [13], [14]. However, a very important aspect of the issue still remains unexplored: whether or not individual social capital facilitates the initiation of a new business? We perceive that an individual's social capital plays dual role in initiating a business. So, this study will examine the effect of social capital on social norms and then its impact on EI of individuals. Douglas and Shepherd [15] asserted that there is a linkage between the individuals attitude towards work, income, independence, risk and intention to become an entrepreneur. Thus the positive attitude towards entrepreneurship also helps to develop EIs. Likewise these attitude and intentions are mediated through the effect of social norms.

The current study is novel as it examines the effect of social capital on the EI with the mediating effect of social norms. Also, this study explains the relationship of social capital and entrepreneurial intentions. Moreover, this study seems to offer the valuable implications for the educational institutes within the area of business and management, also for the government policy makers.

## II. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

### A. Social Capital and Social Norms

Social capital has numerous forms and Social norms is one of the three important of those [16]. Thornton and Flynn [17] argued that entrepreneurship is influenced by social capital at three distinctive levels; connecting industries and firms, those connecting groups and teams and networking ties among persons. As per their conclusion, social capital positively influences the entrepreneurship, since: "those networks in which unity is high and information flow is very easy risk to invest for innovation. Group networks are the contexts which provide the human, financial and social capital that foster entrepreneurship" [17]. Due to these networks' importance many organizations and individuals are looking for to get benefits from entrepreneurial opportunities and chances to develop and create social network with the other performers in the economy. As, with the strong social capital the individuals have greater chance to interact with resourceful persons of the society [3], which enhances their probability to success. Thus, this phenomenon can be strengthened with the strong tie of social norms as it eliminates the problem behaviors of the

Manuscript received May 21, 2019; revised July 12, 2019.

The authors are with University of the Lahore, Lahore, Pakistan (e-mail: rb.raoof@gmail.com, naheed.sultana@lbs.uol.edu.pk, javeria\_sattar@yahoo.com).

society and helps to promote networking of individuals [18]. So, we may draw this hypothesis:

H1: The social capital is positively linked with social norms.

*B. Social Norms and EIs*

Literature reveals that the social norms has been supported to control the behavioral problems by the perception of people around society [18]. The social norms have a prominent effect on the individuals personality or preferences. Also if the entrepreneurs will be promoted in the society, we may assume that the intention to be an entrepreneurs will be higher. As the intentions are influenced by the perceptions and the desires for actions to be taken so the perceptions produced by the social norms ultimately move toward the intention building. Ajzen also asserted that intention can be predicted by the perception of personal attractiveness, feasibility and the social norms [8], [19]. These social norms are based on the emotional and behavioral tendencies of the individuals in any society [20]. Thus we may posit;

H2: The social norms positively influence the EIs of an individual.

H3: The social capital positively influence the EIs of an individual via the mediation of social norms.

*C. Social Capital and EIs*

Social Capital commonly talks about the capabilities of persons to get benefits by means of their distinct position in the structure of the organization, mainly including person’s friends, fellows, relative, classmates and other relationships. The greater an individual can get benefits and assistance from these relations, the greater he or she is having the social capital. Such capital building helps the individuals to access information, make decisions, coordinating different activities, and also supports in utilizing different physical or human capital [21]. So social capital aids to use the resources stemmed from an individual’s position in the social and societal network structure. Which benefice and put significantly positive impact on the emerging entrepreneurs [22]. As, Souitaris defined the entrepreneurial intention as “a state of mind directing a person’s attention and action toward self-employment as opposed to organizational employment” [23]. Although there is less research done on the social capital [24] in relevance of EIs however the research supports the phenomenon that social capital helps to shape the individuals’ EIs [25]. According to the study of , entrepreneurial intent’s formation is directly influenced by the social capital.

As, these arguments positively supports that social capital incline individuals toward EIs. Therefore, we may hypothesize;

H4: social capital positively effects the EI.

The proposed hypotheses are presented in a hypothesized model as in Fig. 1.

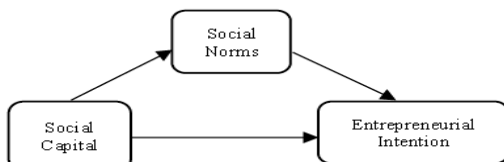


Fig. 1. Hypothesized model.

III. METHOD

*A. Sample and Procedure*

The targeted population for this study was management sciences students of 4 private sector universities of one of the developing country, Pakistan. In this study the unit of analysis was the individual and survey method was used to collect data from 459 students. In the adopted questionnaire there were two parts demographics and content respectively. To ensure the usability of questionnaire, pilot testing was done with 30 respondents who were MBA students in the local university.

However, the adopted questionnaire was easily understandable for all the respondents of pilot survey so we hadn’t opt any changes in the language, wording or number of questions in the questionnaire. The content part has 3 to 7 questions for all 3 variable of the study. It’s a personally administered questionnaire with set of close ended questions against which respondents can register their opinions. The total questionnaires distributed to the students were 650. However, the questionnaire received back were 557 in the first wave while in the second wave 523 questionnaires were received. After cross matching the data 474 were completed however later there were many found missing values. So the particular cases with more missing values were eliminated and the final sample size of 459 questionnaires were selected for the data analysis.

*B. Measures*

The data set comprised of responses measured on 7 points Likert-type scale for the variables. All items of these scales were measured on 7 points Likert scale: (1 strongly disagree, 7 strongly agree). The measuring instrument was adapted and also pilot tested for using in South Asian context. It was based on 2 parts each consisting the demographics and variable information respectively. The second part was based on 20 items which inquired about the and 3 variables understudied in this research. The social norms were measured with 8 items adopted from [26] questionnaire while the entrepreneurial intentions were also adopted from the same questionnaire containing 6 items. Whereas the independent variable social capital was measured through the 6 items scale.

*C. Analysis Techniques*

Data is analyzed in to the three steps. At first, the convergent validity was measured then the discriminant validity, and reliability of the questionnaire was measured by using the confirmatory factor analysis (CFA) and convergent validity and discriminant validity was measured through model re-specification technique [27]. In the second step the hypothesized model was tested by using the SEM technique [28] also direct and indirect effects were calculated. At the third stage, moderation effects were calculated by using the [29] PROCESS macro.

IV. DATA ANALYSIS

*A. CFA*

This analysis is a modeling approach that was created to examine any hypothesized relationship regarding a factor

structure. The present research follows the three recommended CFA phases; reviewing related theories, providing a conceptualization of the hypothesized relationships into a model, and finally, testing the model for internal and external consistency along with the observed explanatory data. Based on some studies [30], a minimum value of 0.50 is predicted to be the standardized factor loading of the items consisting of constructs. Moreover, the goodness of fit indices should be satisfactory in other methods [31]. The goodness of fit indices (absolute, incremental, and parsimonious) are Chi-square per degree of freedom ratio ( $\chi^2/df$ ), Comparative Fit Index (CFI), Incremental Fit Index (IFI), Tucker-Lewis Index (TLI), Root Mean Square Error of Approximation (RMSEA), Adjusted Goodness of fit Index (AGFI), Normed Fit Index (NFI) and Goodness of Fit Index (GFI).

Individual constructs were examined through AMOS 16.0 to examine the measurement model for exogenous and endogenous variables. Also the moment structure technique (AMOS22) was used. Nevertheless, a factor loading of 0.30 is considered acceptable with the number of respondents over 350 [32]. The single factor CFA exhibited poor fit with data ( $\chi^2=3401.10$ ;  $df=170$ ;  $\chi^2/df=20.01$ ;  $RMSEA=0.20$ ;  $GFI=0.47$ ;  $TLI=0.47$ ;  $CFI=0.53$ ). On the other hand the model with all factors loaded in three factor exhibited the good fit with the data with the values ( $\chi^2= 949.68$ ;  $df=167$ ;  $\chi^2/df=5.69$ ;  $RMSEA=0.10$ ;  $GFI=0.82$ ;  $TLI=0.87$ ;  $CFI=0.89$ ). Moreover, the  $\chi^2$  difference test also recognizes the three factor model was better than the single factor CFA model ( $p < 0.05$ ). As the standardized loadings of all the items were rationally higher than the recommended values of 0.50 (0.60-0.94) [28] for their respective factor in the three factor model. So these instruments are better to use in the South Asian context.

As it is important for the researcher to verify the construct validity of the research and link it to the theorized concept, and the situation is such that the more construct validity is

used the more validity is constructed [33].

It has two types of validity; convergent validity and discriminant validity. So for the three factor the convergent validity examined by computing their average variance extracted (AVE) for each of the factor. All the estimate findings were above the recommended value of 0.50 [34]. Similarly for the discriminant validity analysis, the AVEs of all the factors were compared with the squared correlation of all the factors. This method is also recommended by Fornell and Larcker [34] and the Table I shows that the AVE values are higher than the squared correlation value of the respective variables. Furthermore the Cronbach's  $\alpha$  values were observed in the Table I to examine the internal consistency of all the variables [35].

TABLE I: RELIABILITY AND VALIDITY ANALYSIS

| Latent Variables | 1           | 2           | 3           | $\alpha$ |
|------------------|-------------|-------------|-------------|----------|
| Social Norms     | <b>0.53</b> |             |             | 0.90     |
| Social Capital   | 0.13        | <b>0.68</b> |             | 0.93     |
| EIs              | 0.39        | 0.14        | <b>0.67</b> | 0.92     |

### B. Descriptive Statistics

The mean, standard deviations, and correlations between the all variables understudied is illustrated in Table II. Moreover this tables offers the insight for the relationships of the variables.

### C. Direct and Indirect Effects

The hypothesized model is tested in the SEM and the results shows that the fit of three hypothesized model is accepted and better than any other alternative hypothesis. To assess the mediation either full or partial we draw the direct paths from the independent variables to the dependent variables.

The results supports the H1: the social capital is positively linked with social norms.

TABLE II: DESCRIPTIVE STATISTICS AND CORRELATION MATRIX

| Variable       | Mean  | SD   | 1      | 2      | 3      | 4     | 5     | 6     | 7     | 8 |
|----------------|-------|------|--------|--------|--------|-------|-------|-------|-------|---|
| Gender         | 1.45  | 0.51 | 1      |        |        |       |       |       |       |   |
| Age            | 2.23  | 0.97 | 0.02   | 1      |        |       |       |       |       |   |
| Education      | 2.05  | 0.96 | .24**  | .59**  | 1      |       |       |       |       |   |
| Ent. Education | 0.53  | 0.53 | 0.03   | .12*   | .12**  | 1     |       |       |       |   |
| Role Model     | 0.59  | 0.49 | -0.07  | -.13** | -0.07  | .14** | 1     |       |       |   |
| Social Norms   | 37.23 | 9.89 | -.15** | -0.03  | -.21** | -0.01 | .10*  | 1     |       |   |
| Social Capital | 25.63 | 8.87 | -0.09  | -0.02  | -0.02  | -0.02 | 0.08  | .35** | 1     |   |
| EIs            | 31.59 | 9.62 | -.17** | -0.02  | -.15** | 0.02  | .13** | .62** | .37** | 1 |

TABLE III: DIRECT, INDIRECT EFFECTS OF INDEPENDENT VARIABLE ON DEPENDENT VARIABLE

| Independent Variable | Social Norms              | EI      |
|----------------------|---------------------------|---------|
| Social Capital       | Direct                    | 0.38*** |
|                      | Indirect via Social Norms | .13**   |
|                      | Total Effect              | .24**   |
| Social Norms         | Direct                    | .37***  |
|                      | Indirect                  | .61***  |

The positive relationship of social capital that directly influences the social norms is significant as Table III shows (.38,  $p < 0.05$ ). The magnitude of the direct effect is very positive. Moreover, the results affirms the further hypothesis H2 that social norms positively influence the entrepreneurial

intentions as the relationship found is significant and positive as shown in Table III (0.61,  $p < 0.05$ ).

Furthermore, the results also affirms the hypothesis H3 which positions the positive influence of social capital on the entrepreneurial attitude with the mediation of social norms. As the indirect effect of (0.24,  $p < 0.05$ ) in the Table III shows the mediation effects with the positive and significant indirect effect. Nevertheless, results revealed that there is significantly positive effect of social capital on the EI of an individual as the Table III shows (0.61,  $p < 0.05$ ). Thus it supports the H4: social capital positively effects the EI, and depicts the partially mediated effect of social norms on to the EIs by the social capital.

## V. DISCUSSION

## A. Academic Contribution

Although the entrepreneurial literature has been expanded over the time [4] but still the link with social capital is yet needs to be explored [21]. So this study has tested direct relationship of independent variables on to the dependent variable as how social capital impacts the entrepreneurial intentions of the individuals. Also this study has examined the direct effect of social norms on entrepreneurial intentions and enriched the literature by analyzing indirect effect of social capital on to the EI via mediation of social norms. The findings of the study exposed that the impact of social capital on the entrepreneurial intentions through mediation of social norms [36] is partially significant. Although the results affirms the strong direct and positive relationship of social capital onto the entrepreneurial intentions.

## B. Implications for Public Policy

This study offer implications to the education public policy of the developing countries to design the curriculum according to the need of students and promote positive social norms by introducing the more incubation centers in the campus. Moreover through different workshop and training sessions students exposure with the new ideas and interaction with the role models must be enhanced [37].

## C. Limitations and Research Directions

To comprehend the understanding of entrepreneurial intentions the perspective of the business personnel's can be included instead of just encompasses the students in sample. This study has explored the mediation effect on entrepreneurial intentions however the future researches may go for the multidimension constructs [38] of this model.

## D. Conclusion

Entrepreneurship is a noteworthy cause of economic development that makes business openings and lessens joblessness. Entrepreneurial intent is the key to disclosing entrepreneurship and helpful for affecting entrepreneurial activity. Various entrepreneurial researches have concentrated on presentation to entrepreneurial good examples, disposure of scholarly capital, and past entrepreneurial experience and knowledge, yet have once in a while looked positively on the incorporated impacts of social capital that are especially pivotal in the present unique condition and for more youthful ages. The motivation behind the current research was to determine the connection among social capital and entrepreneurial intent.

The discoveries demonstrate that social capital is essentially and significantly connected with entrepreneurial intent and its precursor (Subjective Norms). This study demonstrates that the indirect effect on the entrepreneurial intentions through the mediation of social norms is partially significant. Perceived behavior, entrepreneurial intent [21, 39] and the state of mind towards turning into a business visionary [21] are positively impacted and affected by social norms.

The outcomes and findings agree with those of different past researchers on the importance of introduction to

entrepreneurial good examples [40] and social help from week and strong ties [22], [39] in invigorating entrepreneurial intent. In this way, an environment that is socially supportive, in which activities of entrepreneurship are valued, that acknowledges and celebrates the entrepreneurial roles in their society, gives different sorts of social support. Thus, these results avowed the promotion of social norms through different trainings and enhancing expertise in the society to enhance the economic development through entrepreneurial ventures specially in the developing country.

## REFERENCES

- [1] J. Iversen, R. Jørgensen, and N. Malchow-Møller, "Defining and measuring entrepreneurship," *Foundations and Trends® in Entrepreneurship*, vol. 4, no. 1, pp. 1-63, 2007.
- [2] S. E. Sanyang and W. C. Huang, "Entrepreneurship and economic development: The EMPRETEC showcase," *International Entrepreneurship and Management Journal*, vol. 6, no. 3, pp. 317-329, 2010.
- [3] Z. J. Acs, S. Desai, and J. Hessels, "Entrepreneurship, economic development and institutions," *Small Business Economics*, vol. 31, no. 3, pp. 219-234, 2008.
- [4] W. Naudé, *Entrepreneurship and Economic Development*, Springer, 2010.
- [5] N. F. Krueger and A. L. Carsrud, "Entrepreneurial intentions: Applying the theory of planned behavior," *Entrepreneurship & Regional Development*, vol. 5, no. 4, pp. 315-330, 1993.
- [6] E. R. Thompson, "Individual entrepreneurial intent: Construct clarification and development of an internationally reliable metric," *Entrepreneurship Theory and Practice*, vol. 33, no. 3, pp. 669-694, 2009.
- [7] S. C. de Janasz and S. J. Behson, "Cognitive capacity for processing work-family conflict: An initial examination," *Career Development International*, vol. 12, no. 4, pp. 397-411, 2007.
- [8] N. F. Krueger Jr, M. D. Reilly, and A. L. Carsrud, "Competing models of entrepreneurial intentions," *Journal of Business Venturing*, vol. 15, no. 5-6, pp. 411-432, 2000.
- [9] L. Kolvareid, "Prediction of employment status choice intentions," *Entrepreneurship Theory and Practice*, vol. 21, no. 1, pp. 47-58, 1996.
- [10] N. F. Krueger Jr and D. V. Brazeal, "Entrepreneurial potential and potential entrepreneurs," *Entrepreneurship Theory and Practice*, vol. 18, no. 3, pp. 91-104, 1994.
- [11] I. Ajzen, "The theory of planned behavior," *Organizational Behavior and Human Decision Processes*, vol. 50, no. 2, pp. 179-211, 1991.
- [12] I. Ajzen, "Perceived behavioral control, self-efficacy, locus of control, and the theory of planned behavior 1," *Journal of Applied Social Psychology*, vol. 32, no. 4, pp. 665-683, 2002.
- [13] S. Read, M. Song, and W. Smit, "A meta-analytic review of effectuation and venture performance," *Journal of Business Venturing*, vol. 24, no. 6, pp. 573-587, 2009.
- [14] S. Turner and P. Nguyen, "Young entrepreneurs, social capital and Doi Moi in Hanoi, Vietnam," *Urban Studies*, vol. 42, no. 10, pp. 1693-1710, 2005.
- [15] E. J. Douglas and D. A. Shepherd, "Self-employment as a career choice: Attitudes, entrepreneurial intentions, and utility maximization," *Entrepreneurship Theory and Practice*, vol. 26, no. 3, pp. 81-90, 2002.
- [16] J. S. Coleman, "Social capital in the creation of human capital," *American Journal of Sociology*, vol. 94, pp. S95-S120, 1988.
- [17] P. H. Thornton and K. H. Flynn, "Entrepreneurship, networks, and geographies," *Handbook of Entrepreneurship Research*, pp. 401-433, 2003.
- [18] P. W. Schultz, "The constructive, destructive, and reconstructive power of social norms," *Psychological Science*, vol. 18, no. 5, pp. 429-434, 2007.
- [19] I. Ajzen, "From intentions to actions: A theory of planned behavior," *Action Control*, pp. 11-39, 1985.
- [20] J. Elster, "Social norms and economic theory," *Journal of Economic Perspectives*, vol. 3, no. 4, pp. 99-117, 1989.
- [21] F. Liñán and F. J. Santos, "Does social capital affect entrepreneurial intentions?" *International Advances in Economic Research*, vol. 13, no. 4, pp. 443-453, 2007.
- [22] P. Davidsson and B. Honig, "The role of social and human capital among nascent entrepreneurs," *Journal of Business Venturing*, vol. 18, no. 3, pp. 301-331, 2003.

- [23] V. Souitaris, S. Zerbinati, and A. Al-Laham, "Do entrepreneurship programmes raise entrepreneurial intention of science and engineering students? The effect of learning, inspiration and resources," *Journal of Business Venturing*, vol. 22, no. 4, pp. 566-591, 2007.
- [24] M. Paldam, "Social capital: One or many? Definition and measurement," *Journal of Economic Surveys*, vol. 14, no. 5, pp. 629-653, 2000.
- [25] F. Liñán, F. J. Santos, and J. L. Roldán, *Entrepreneurial Intention, Cognitive Social Capital and Culture: Empirical Analysis for Spain and Taiwan*, 2008.
- [26] F. Liñán and Y. W. Chen, *Testing the Entrepreneurial Intention Model on a Two-Country Sample*, 2006.
- [27] J. C. Anderson and D. W. Gerbing, "Structural equation modeling in practice: A review and recommended two-step approach," *Psychological Bulletin*, vol. 103, no. 3, pp. 411, 1988.
- [28] R. B. Kline, *Convergence of Structural Equation Modeling and Multilevel Modeling*, 2011.
- [29] J. H. Bolin and F. Hayes, Andrew, "Introduction to mediation, moderation, and conditional process analysis: A Regression-based approach. New York, NY: The Guilford Press," *Journal of Educational Measurement*, vol. 51, no. 3, pp. 335-337, 2014.
- [30] J. Hair Jr, "SEM: An introduction," *Multivariate Data Analysis: A Global Perspective*, pp. 629-686, 2010.
- [31] D. W. Gerbing and J. C. Anderson, "Monte Carlo evaluations of goodness of fit indices for structural equation models," *Sociological Methods & Research*, vol. 21, no. 2, pp. 132-160, 1992.
- [32] J. F. Hair, *Multivariate Data Analysis (Vol. 6)*, Upper Saddle River, NJ: Pearson Prentice Hall, 2006.
- [33] V. Malhotra and S. C. Stanton, *Validating Inter-Object Interaction in Object-Oriented Designs*, 2004.
- [34] C. Fornell and D. F. Larcker, "Structural equation models with unobservable variables and measurement error: Algebra and statistics," *Journal of Marketing Research*, pp. 382-388, 1981.
- [35] J. Nunally and I. Bernstein, *Psychometric Theog*, New York: McGraw-Hill Book, 1978.
- [36] W. R. Meek, D. F. Pacheco, and J. G. York, "The impact of social norms on entrepreneurial action: Evidence from the environmental entrepreneurship context," *Journal of Business Venturing*, vol. 25, no. 5, pp. 493-509, 2010.
- [37] A. BarNir, W. E. Watson, and H. M. Hutchins, "Mediation and moderated mediation in the relationship among role models, self-efficacy, entrepreneurial career intention, and gender," *Journal of Applied Social Psychology*, vol. 41, no. 2, pp. 270-297, 2011.
- [38] J. Tsai, "The role of coping, resilience, and social support in mediating the relation between PTSD and social functioning in veterans returning from Iraq and Afghanistan," *Psychiatry: Interpersonal & Biological Processes*, vol. 75, no. 2, pp. 135-149, 2012.
- [39] J. Malebana, "Entrepreneurial intentions of South African rural university students: A test of the theory of planned behavior," *Journal of Economics and Behavioral Studies*, vol. 6, no. 2, pp. 130-143, 2014.
- [40] R. Uygun and M. Kasimoglu, "The emergence of entrepreneurial intentions in indigenous entrepreneurs: The role of personal

background on the antecedents of intentions," *International Journal of Business and Management*, vol. 8, no. 5, p. 24, 2013.



**Rabeeya Raooft** was born in Sialkot, Pakistan on March 10, 1974. She received the Ph.D in management sciences at university of the Lahore, Lahore, Pakistan.

She works as an associate professor in the University of the Lahore, Islamabad Campus, Pakistan since 2015. Along her teaching expertise prior she served as director admissions and director of student affairs in the University of Lahore. Her research

interest areas are finance and economics.



**Naheed Sultana** was born in Khanewal, Pakistan on August 9, 1956.

She works as a professor in the Lahore Business School, The University of Lahore since November 2012 to present. Prior, she served as the dean in Faculty of Management Sciences, University of the Lahore. Alongside she was always been associated with

teaching. She was also the member of disciplinary and examination committee of federal government college for women.

Some of her previous research includes following;

- S. Zain ul Abidin, O. Farooq, N. Sultana, and M. Farooq, "The impact of heuristics on investment decision and performance: Exploring multiple mediation mechanism," *Research in International Business And Finance*, vol. 42, pp. 674-688, 2017.
- M. Arshad, O. Farooq, N. Sultana, and M. Farooq, "Determinants of individuals' entrepreneurial intentions in developing countries: A comparative study of male and female graduates," *Career Development International*, vol. 21, no. 3, (Impact Factor=1.29), 2016.
- N. Sultana, A. Bushra, and M. Asma, "The upshots of corporate governance on sustainable business and economic growth in the context of Pakistan," *International SAMANM Journal of Business and Social Sciences*, vol. 3, no. 1, 2015.

Naheed is also a member of HEC Thematic Research Grant Committee since 2015 and serving as adviser to the Punjab Public Service Commission since 2012 to present.



**Javeria Sattar** was born in Lahore, Pakistan on June 4, 1990. She works as a senior officer in University of the Lahore since September 2018 to present.

Prior, she had served as a program coordinator/lecturer to the University of the Lahore and participated in different training workshops and also served as a visiting faculty of University of the Education, Lahore, Pakistan. Her research interest area is in entrepreneurship and economic development.