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**IMPACT OF PERSONALITY TRAITS ON  
ENTREPRENEURIAL INTENTIONS IN PAKISTAN:  
THE MODERATING ROLE OF TEACHING  
METHODOLOGY**



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**DOCTOR OF PHILOSOPHY  
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IMPACT OF PERSONALITY TRAITS ON ENTREPRENEURIAL INTENTIONS  
IN PAKISTAN: THE MODERATING ROLE OF TEACHING METHODOLOGY



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Thesis Submitted to  
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## ABSTRACT

An important aspect needed for promoting entrepreneurship is the identification of individuals possessing a specific personality suitable to foster entrepreneurial intentions. Entrepreneurial intentions can be strengthened among the students of the right personality type by endowing them with the required skills and knowledge using experiential teaching methodology. Therefore, this study focused on investigating teaching methodology as the moderating variable in the relationship between personality traits and entrepreneurial intentions. This study utilised the dynamic view of Entrepreneurial Event Model. Data was collected using the stratified proportionate random sampling through a cross-sectional survey of 315 students of sixteen universities in Islamabad, Pakistan. The study used structural equation modelling to test the inter-relationship among the variables. Finding of this study reveals a significant and positive relationship between personality (entrepreneurial proactivity, entrepreneurial creativity, entrepreneurial opportunism and entrepreneurial vision) and entrepreneurial intentions. Moreover, the study further tests the impact of teaching methodologies adopted by lecturers of entrepreneurship in the university. Finding also reveals that experiential teaching methodology has a moderating impact on the relationship between entrepreneurial creativity, entrepreneurial vision and entrepreneurial intentions. Furthermore, teaching methodology does not have a significant moderating influence on the relationship between entrepreneurial proactivity and entrepreneurial intentions, and entrepreneurial vision and entrepreneurial intentions. This study contributes to the literature by suggesting that appropriate experiential teaching methodologies strengthen entrepreneurial intentions. This study provides empirical evidence on personality, teaching methodology and entrepreneurial intentions within the domain of Entrepreneurial Event Model and Human Capital Theory, in the context of Pakistan. The results of this study have implications for students, entrepreneurship teachers, university management, incubation centre managers and policy makers. Finally, limitation of the study and future research directions are discussed.

**Keywords:** personality, entrepreneurial intentions, teaching methodology, proactivity, creativity, opportunism, vision.

## ABSTRAK

Aspek penting yang diperlukan untuk menggalakkan keusahawanan ialah mengenal pasti individu yang memiliki personaliti tertentu yang sesuai untuk memupuk niat keusahawanan. Niat keusahawanan dapat diperkukuhkan dalam kalangan pelajar melalui jenis personality yang betul dengan cara menyediakan mereka dengan kemahiran dan pengetahuan yang diperlukan menggunakan metodologi pembelajaran pengalaman. Oleh itu, kajian ini memberikan tumpuan kepada penyelidikan terhadap metodologi pengajaran sebagai pemboleh ubah pengantara dalam hubungan di antara ciri personaliti dengan niat keusahawanan. Kajian ini menggunakan pandangan dinamik Model Aktiviti Keusahawanan. Data dikumpulkan menggunakan persampelan rawak berstrata melalui kaji selidik keratin rentas terhadap 315 orang pelajar di enam belas buah universiti di Islamabad, Pakistan. Kajian turut menggunakan pemodelan persamaan berstruktur untuk menguji hubungan antara pemboleh ubah. Dapatan kajian ini mendedahkan hubungan yang signifikan dan positif antara personaliti (proaktif keusahawanan, kreativiti keusahawanan, oportunisme keusahawanan dan wawasan keusahawanan) dengan niat keusahawanan. Selain itu, kajian ini juga menguji kesan kaedah pengajaran yang diguna pakai oleh pensyarah keusahawanan di universiti. Penemuan juga mendedahkan bahawa metodologi pengajaran melalui pembelajaran pengalaman mempunyai kesan pengantara terhadap hubungan antara kreativiti keusahawanan, visi keusahawanan dan niat keusahawanan. Tambahan pula, metodologi pengajaran tidak mempunyai kesan pengantaraan yang signifikan terhadap hubungan antara keusahawanan proaktif dengan niat keusahawanan, dan visi keusahawanan dengan niat keusahawanan. Kajian ini menyumbang kepada literatur dengan mendedahkan bahawa metodologi pembelajaran pengalaman yang sesuai dapat memperkuat niat keusahawanan. Kajian ini turut memberikan bukti empirik terhadap personaliti, metodologi pengajaran dan niat keusahawanan dalam domain Model Aktiviti Keusahawanan dan Teori Modal Insan dalam konteks negara Pakistan. Hasil kajian ini memberikan implikasi kepada pelajar, tenaga pengajar keusahawanan, pengurusan universiti, pengurus pusat inkubasi dan pembuat dasar. Akhir sekali, batasan kajian dan arah tuju untuk penyelidikan pada masa hadapan juga dibincangkan.

**Kata kunci:** personaliti, niat keusahawanan, metodologi pengajaran, proaktif, kreativiti, oportunisme, visi

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## LIST OF ABBREVIATIONS

AHAN	Aik Hunar Aik Nagar
CIPE	Centre for International Private Enterprise
AVE	Average Variance Extracted
BIC	Business Incubation Centre
CMV	Common Method Variance
EC	Entrepreneurial Creativity
EEM	Entrepreneurial Event Model
EEP	Entrepreneurship Education Program
EI	Entrepreneurial Intentions
EIQ	Entrepreneurial Intentions Questionnaire
EO	Entrepreneurial Opportunism
EP	Entrepreneurial Proactivity
EV	Entrepreneurial Vision
FFM	Five Factor Model
GDP	Gross Domestic Product
GEI	Global Education Initiative
GEM	Global Entrepreneurship Monitor
GERA	Global Entrepreneurship Research Association
GoF	Goodness of Fit
GUESSS	Global University Entrepreneurial Spirit Students' Survey
HCT	Human Capital Theory
HEC	Higher Education Commission
HEI	Higher Education Institution
ICT	Islamabad Capital Territory
LID	Learning Innovation Division
MBA	Master of Business Administration
META	Measure of Entrepreneurial Tendency and Ability
NEMIS-AEPAM	National Educational Management Information System - Academy of Educational Planning and Management
NGF	New Growth Framework
ORIC	Office of Research, Innovation and Commercialisation
PBC	Perceived Behavioural Control
PLS-SEM	Partial Least Squares – Structural Equation Modelling
SME	Small and Medium Enterprises
SMEDA	Small and Medium Enterprise Development Authority
TEA	Total Entrepreneurial Activity
TEVTA	Technical Education and Vocational Training Authority
TPB	Theory of Planned Behaviour
TM	Teaching Methodology
VIF	Variance Inflation Factor
WBIC	Women Business Incubation Centre
WEF	World Economic Forum

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## CHAPTER ONE

### INTRODUCTION

#### 1.1 Background of the Study

Entrepreneurial ventures are the dominant birthplace of innovation, employment creation and economic growth. With the capacity to alter existing industries or create new ones (Schumpeter, 1934), the innovative contributions of these entrepreneurial initiatives have profound effects on employment and economic growth on the societal level (McGrath, 1999). Entrepreneurship has become the source of wealth creation and economic stability; more wealth has been created within the past 50 years than any time period (Capgemini & RBC Wealth Management, 2013). Given this previous incremental growth coupled with the more recent exponential rise in awareness about entrepreneurship and self-employment, it is reasonable to propose that entrepreneurship plays a pivotal role in fostering individual, national and global economic growth (Planning Commission, Government of Pakistan, 2011).

Furthermore, entrepreneurship is considered as the backbone of any economy assisting in direct economic growth (Sautet, 2013; Holmén & McKelvey, 2013; Guerrero, Cunningham, & Urbano, 2015) and reduction in poverty (Bruton, Ketchen, & Ireland, 2013; Alvarez, Barney, & Newman, 2015; Bruton, Ahlstrom, & Si, 2015) as well as creating employment opportunities (Audretsch, 2012; Acs, Audretsch, & Lehmann, 2013). The European Commission credits 66.9% of the employment to Small and Medium Enterprises (SMEs) originating as a result of entrepreneurial intentions (Muller, et al., 2015). In Pakistan, SMEs constitute 90% of all enterprises

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## APPENDICES

### Appendix A

#### Questionnaire

Dear Respondent,

I am conducting research on “Impact of Personality on Entrepreneurial Intentions: The Moderating Role of Teaching Methodology”, through this survey questionnaire as part of my PhD Research. There is no right or wrong answer to any question in this survey questionnaire. The data collected through this survey will be used for the research purpose only. Therefore your objective opinion in answering these questions will be highly valuable. All data will be kept confidential.

The directions for each section are given at the start of each individual section for your continuous assistance.

Your participation is crucial for this research. We sincerely appreciate your time and efforts for contribution in this survey

Aqeel Israr  
PhD Scholar (95933),  
(Training)  
UUM Malaysia  
Senior Lecturer,  
Bahria University, Islamabad Campus

Dr. Norashidah Hashim  
Deputy Director  
CEDI, UUM Malaysia



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### Section 1: Entrepreneurial Intentions

This section deals with the Intention of becoming an Entrepreneurs and initiating a new venture. You are required to assess your own self in this respect. Your response in this section ranges from (1) denoting “completely disagree” to (5) denoting “completely agree”. Kindly mark your selection with a ✓

S. No		(1)	(2)	(3)	(4)	(5)
1	I am ready to do anything to be an entrepreneur.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	My professional goal is to become an entrepreneur.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	I will make every effort to start and run my own firm.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	I am determined to create a firm in the future.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	I have very serious thought of starting a firm.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	I have a firm intention to start a firm someday.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### Section 2: Personality

For this section, you are required to assess your own self as per the statements provided. Your response in this section ranges from (1) denoting “completely disagree” to (5) denoting “completely agree”. Kindly mark your selection with a “✓”.

Sr. No.	Statement	(1)	(2)	(3)	(4)	(5)
7	Creating something that is useful to people and a profitable for myself is my idea of perfection	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8*	Even when I spot a profitable opportunity I rarely act on it	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9	I always dreamed of creating something (e.g., a product or service) that has an objectively recognised value	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10	I always know when there is a “gap in the market” for a new product or service	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11	I always strive to make things better for myself and/or others	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12	I am highly future oriented	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13	I am quick to spot profitable opportunities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14	I am very creative	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15	I am very forward-looking	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16	I am very good at coming up with novel solutions to problems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17*	I don't always grab the opportunities that I have	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18	I have a strong desire for progress	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19	I have great business ideas before others do	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20*	I like following accepted procedures at work or school	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21*	I often fail to act on valuable opportunities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22*	I rarely act on profitable opportunities, even when believe they can benefit me or others	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23*	I rarely think outside the box	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24	I see myself as highly innovative	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- 25 I see profitable opportunities where others do not
- 26 I try to take advantage of every profitable opportunity I see
- 27 I usually have the innovative ideas in group tasks or projects
- 28 I'm generally the first to see a commercial opportunity when it appears
- 29\* I'm not particularly interested in creating something of commercial or social value
- 30 I'm very alert to opportunities to create commercial or social value
- 31 If I see an opportunity I jump on it
- 32 If there is a profitable opportunity, I will see it
- 33\* It is not that I don't see profitable opportunities, I just don't have the motivation to do anything about them
- 34 My aim in life is finding new ways to make economic or social progress
- 35 People tend to think of me as highly innovative
- 36\* There is little point in trying to find new ways of doing something if old ways work

### Section 3: Teaching Methodology

For this section, grade the effectiveness of a teaching methodology / activity used by the teacher during your course on Entrepreneurship. Your response in this section ranges from (1) denoting "Very ineffective" to (5) denoting "very effective". If any certain activity was not conducted / used, kindly select "N/A", denoting "Not Applicable". Kindly mark your selection with a ✓

S. No		N/A	(1)	(2)	(3)	(4)	(5)
37	Internships	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
38	Case Analysis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
39	Case Studies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
40	Management Simulations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
41	Experiential Exercises	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
42	Role Playing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
43	Videos	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Section 4: Demographic Information

- 44 Name of University \_\_\_\_\_
- 45 Have you taken any Entrepreneurship course during your study at the university?  
 Yes  No
- 46 What is your program of study (e.g. BBA, MBA etc.)?  
\_\_\_\_\_
- 47 What is your area of specialisation (e.g. Marketing, Finance, HR etc.)?  
\_\_\_\_\_
- 48 Gender  
 Male  Female
- 49 Your age in years. \_\_\_\_\_
- 50 What is your hometown? \_\_\_\_\_
- 51 Do you have any work experience?  
 Yes  No
- 52 Have your parents ever started a business?  
 Yes  No
- 53 Have your friends ever started a business?  
 Yes  No
- 54 Does your teacher of Entrepreneurship have any prior experience of starting a business?  
 Yes  No
- 55 Does your teacher of Entrepreneurship course have any corporate experience?  
 Yes  No

Section 5: Contact Information

Any information provided will be considered as strictly confidential and will only be used for the aims of this research.

Name: \_\_\_\_\_  
Mobile: \_\_\_\_\_  
Email: \_\_\_\_\_

## Appendix B

### Permission to use Questionnaire

Re: Entrepreneurial Intention Questionnaire

---

Francisco Liñán <fLiñán@us.es>

Tue, Dec 22, 2015 at 8:54 PM

Reply-To: Francisco Liñán <fLiñán@us.es>

To: [aqeelisrar@gmail.com](mailto:aqeelisrar@gmail.com)

Dear Aqeel Israr,

Thank you for your interest in our work. Please find attached 3 versions of the EIQ and the papers in which they were used. The first versions (EIQ2 and EIQ3) are designed as aggregated scales. The papers in which they were used are Liñán & Chen (2009) and Liñán, Urbano & Guerrero (2011), respectively. More recently, within the VIE Project (<http://institucional.us.es/vie>), we have developed a newer and more refined questionnaire. In it, Personal Attitude and Subjective Norm has been measured by pondering personal beliefs with the relevance attached to each belief.

I attached this newer version of the questionnaire (Original in Spanish, the translation made by ourselves) and one of the papers in which it was used (Liñán, Moriano & Jaén, 2016).

You can use them as you feel is best, but do please acknowledge your source.

Best regards,

--

Prof. Francisco Liñán

Universidad de Sevilla // University of Seville

Av. Ramon y Cajal, 1. E41018 - Sevilla (Spain)

T: [+34.954554487](tel:+34954554487).

F: [+34.954551636](tel:+34954551636).

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franciscoLiñánalcalde

Web: [https://www.researchgate.net/profile/Francisco\\_Liñán](https://www.researchgate.net/profile/Francisco_Liñán) ; <https://es.linkedin.com/in/franciscoLiñán>

<http://www.masteremprededoresus.com>



**Ahmetoglu, Gorkan** <g.ahmetoglu@ucl.ac.uk> Tue, May 3, 2016 at 5:27 AM  
To: Aqeel Israr <aqeelisrar@gmail.com>

Hi Aqeel,

Very happy to hear about your interest in META.

Please find attached the questionnaire.

All the best,

Gorkan

Dr Gorkan Ahmetoglu  
Lecturer of Business Psychology  
University College London  
[www.metaprofiling.com](http://www.metaprofiling.com)  
Mob: [++ 44 \(0\) 788 648 3637](tel:++4407886483637)  
Office: [++ 44 \(0\) 207 679 5401](tel:++4402076795401)



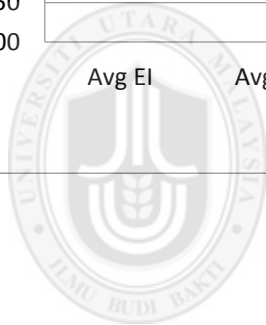
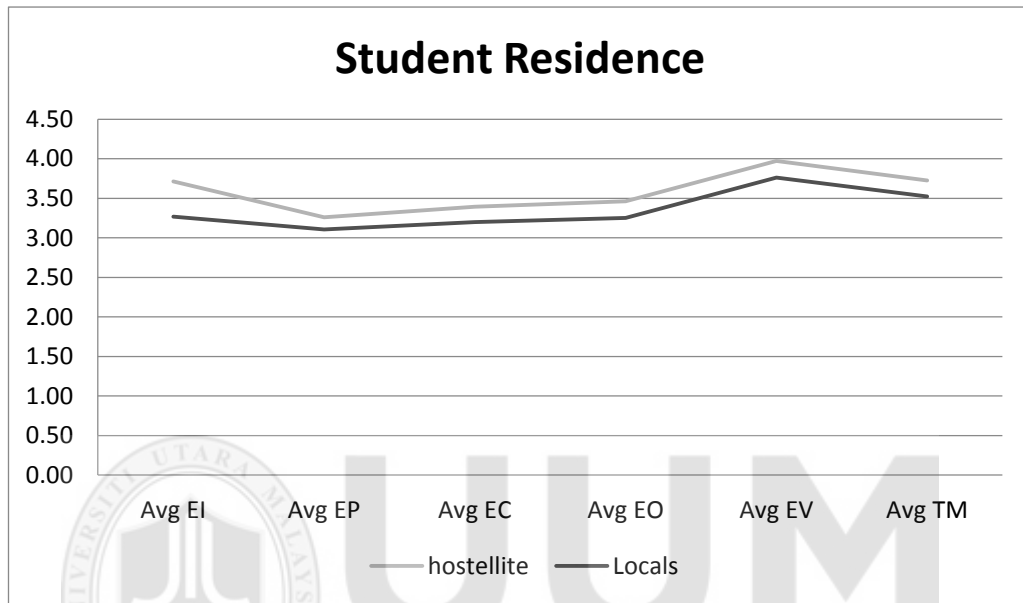
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## Appendix C

### Additional Data Analysis Results

#### Home Town

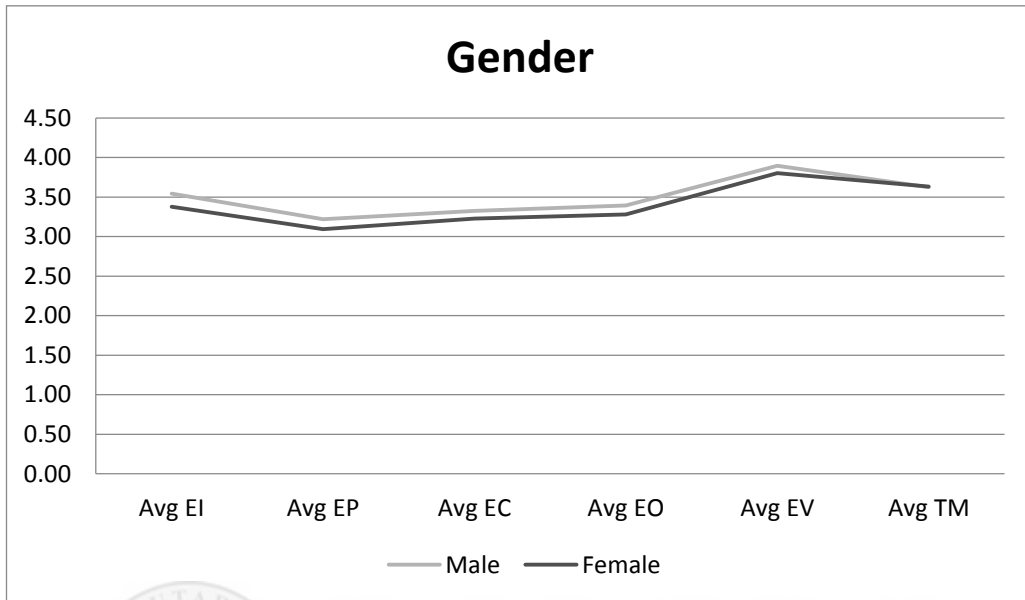
	EI	EP	EC	EO	EV	TM
Hostellite	3.71	3.26	3.39	3.46	3.97	3.73
Locals	3.27	3.10	3.20	3.25	3.76	3.52



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### Gender

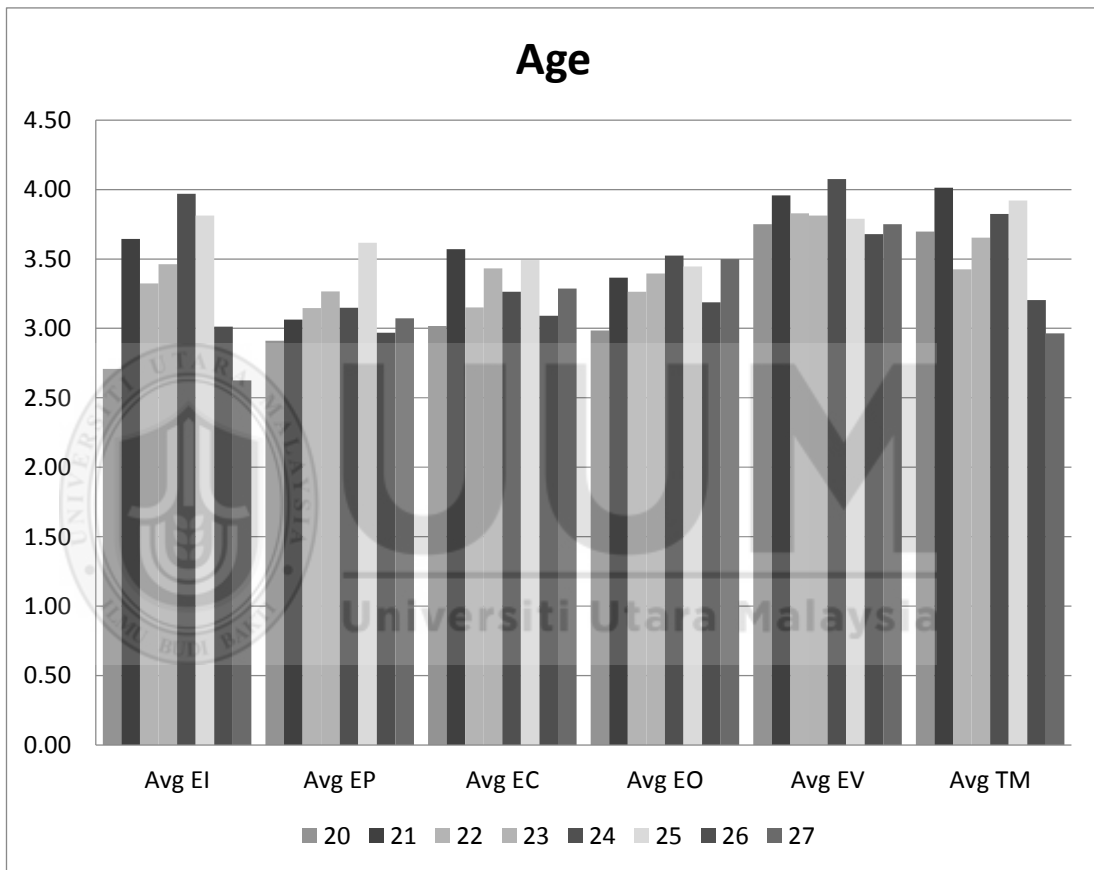
Gender	EI	EP	EC	EO	EV	TM
Male	3.54	3.22	3.33	3.39	3.89	3.62
Female	3.38	3.09	3.23	3.28	3.80	3.63



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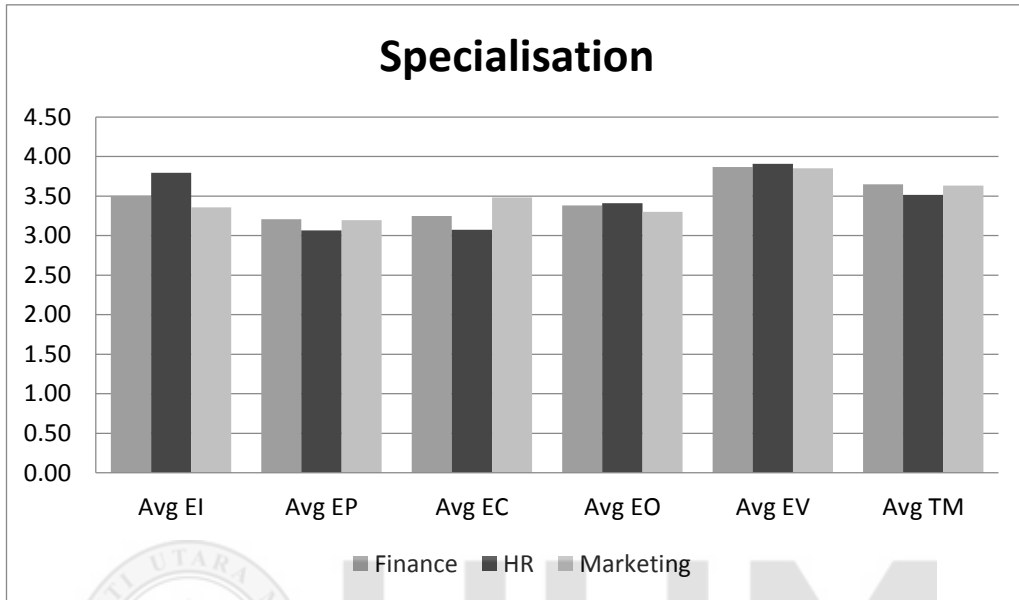
**Age**

Age	EI	EP	EC	EO	EV	TM
20	2.71	2.91	3.02	2.98	3.75	3.70
21	3.64	3.06	3.57	3.36	3.96	4.01
22	3.32	3.15	3.15	3.26	3.83	3.42
23	3.46	3.27	3.43	3.40	3.81	3.65
24	3.97	3.15	3.26	3.52	4.07	3.82
25	3.81	3.62	3.49	3.45	3.79	3.92
26	3.01	2.97	3.09	3.19	3.68	3.20
27	2.63	3.07	3.29	3.50	3.75	2.96



### Specialisation

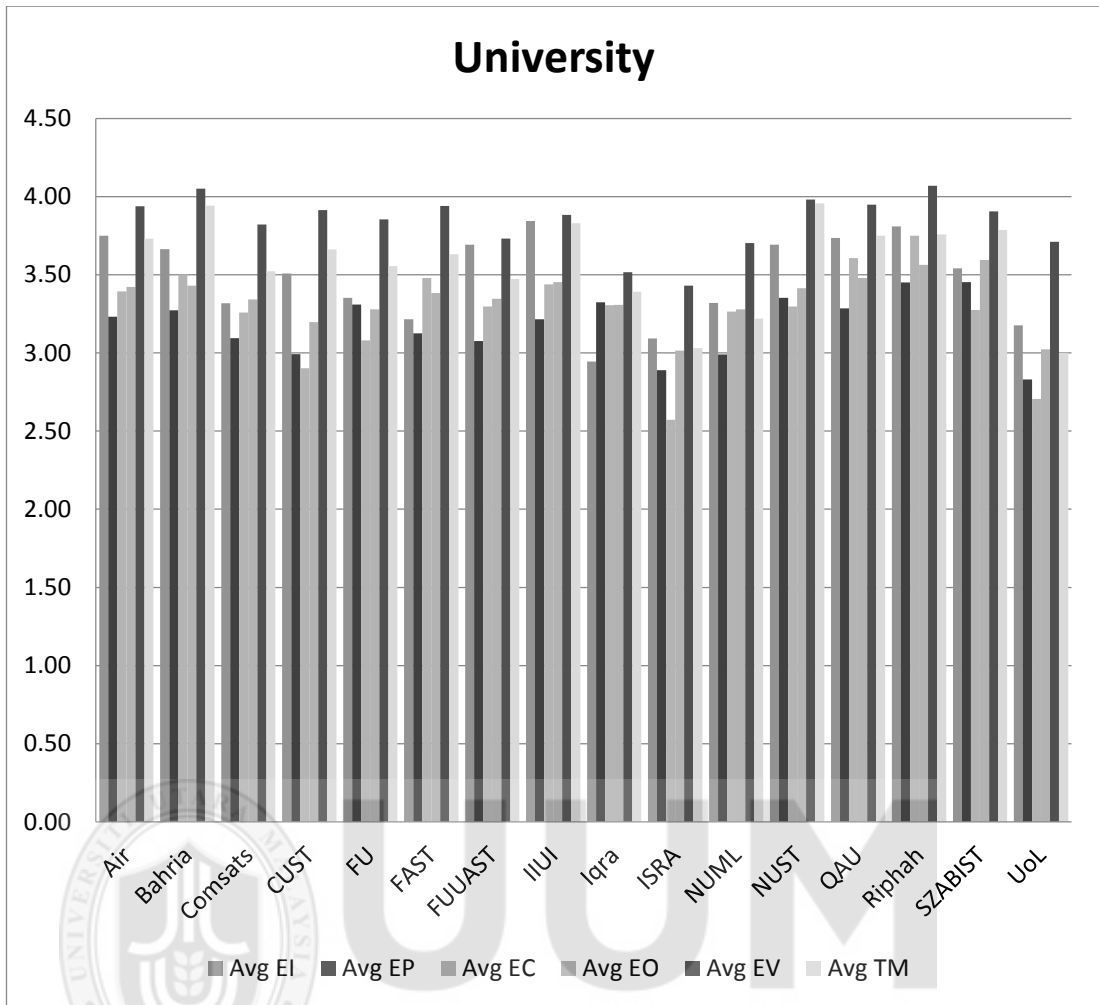
Specialisation	EI	EP	EC	EO	EV	TM
Finance	3.50	3.21	3.25	3.38	3.87	3.65
HR	3.79	3.07	3.07	3.41	3.91	3.52
Marketing	3.36	3.20	3.48	3.30	3.85	3.63



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**University**

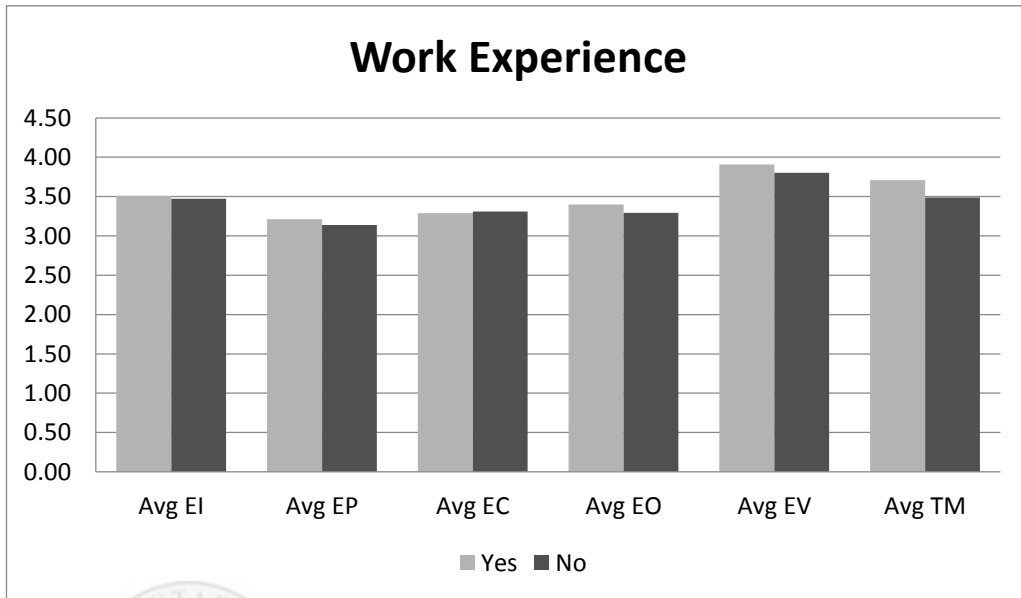
University	EI	EP	EC	EO	EV	TM
Air University	3.75	3.23	3.39	3.42	3.94	3.73
Bahria University	3.66	3.27	3.50	3.43	4.05	3.94
Comsats University	3.32	3.09	3.26	3.34	3.82	3.52
Capital University of Science and Technology (CUST)	3.51	2.99	2.90	3.20	3.91	3.66
Foundation University (FU)	3.35	3.31	3.08	3.28	3.85	3.56
Foundation for Advancement of Science and Technology (FAST)	3.22	3.13	3.48	3.38	3.94	3.63
Federal Urdu University of Arts Science and Technology (FUUAST)	3.69	3.08	3.30	3.35	3.73	3.47
International Islamic University Islamabad (IIUI)	3.84	3.21	3.44	3.45	3.88	3.83
Iqra University	2.94	3.32	3.30	3.31	3.52	3.39
ISRA University	3.09	2.89	2.57	3.01	3.43	3.03
National University of Modern Languages (NUML)	3.32	2.99	3.26	3.28	3.70	3.22
National University of Science and Technology (NUST)	3.69	3.35	3.30	3.41	3.98	3.96
Quaid e Azam University QAU	3.74	3.29	3.61	3.48	3.95	3.75
Riphah University	3.81	3.45	3.75	3.56	4.07	3.76
Shaheed Zulfiqar Ali Bhutto Institute of Science and Technology (SZABIST)	3.54	3.45	3.27	3.59	3.91	3.79
University of Lahore (UoL)	3.18	2.83	2.71	3.02	3.71	3.00



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### Work Experience

	EI	EP	EC	EO	EV	TM
Yes	3.51	3.21	3.29	3.40	3.91	3.71
No	3.47	3.14	3.31	3.29	3.80	3.49

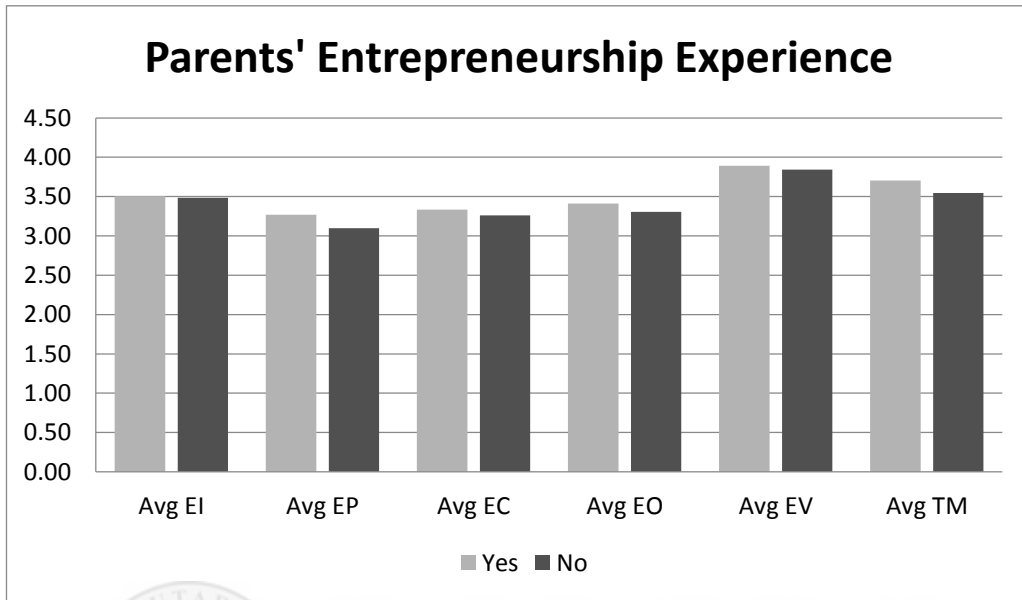


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### Parents' Entrepreneurship Background

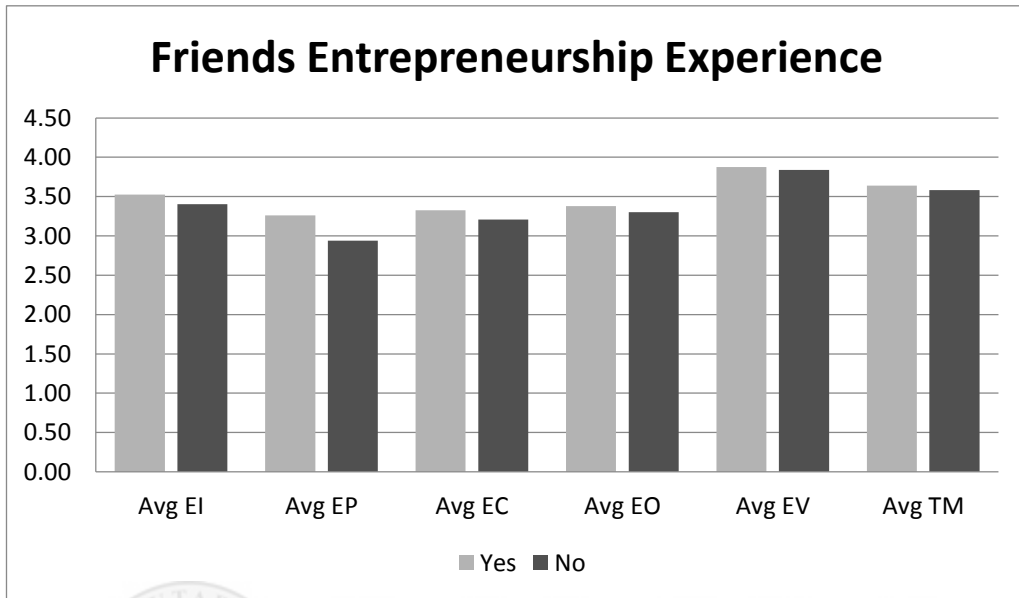
	EI	EP	EC	EO	EV	TM
Yes	3.50	3.27	3.33	3.41	3.89	3.71
No	3.49	3.10	3.26	3.31	3.84	3.55



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### Friends' Entrepreneurship Background

	EI	EP	EC	EO	EV	TM
Yes	3.52	3.26	3.33	3.38	3.88	3.64
No	3.40	2.94	3.21	3.30	3.84	3.58



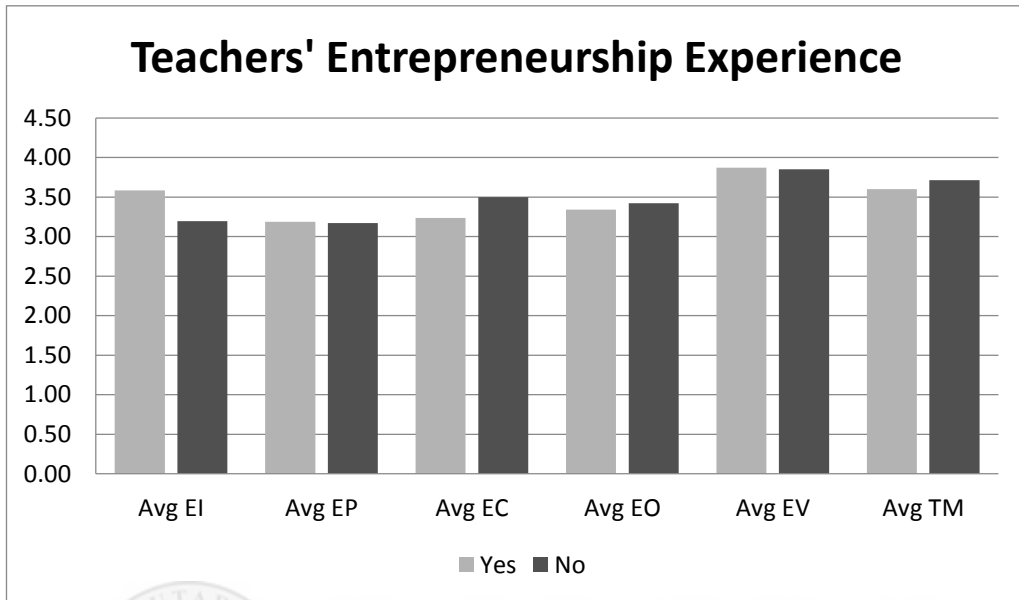
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### Teachers' Entrepreneurship Experience

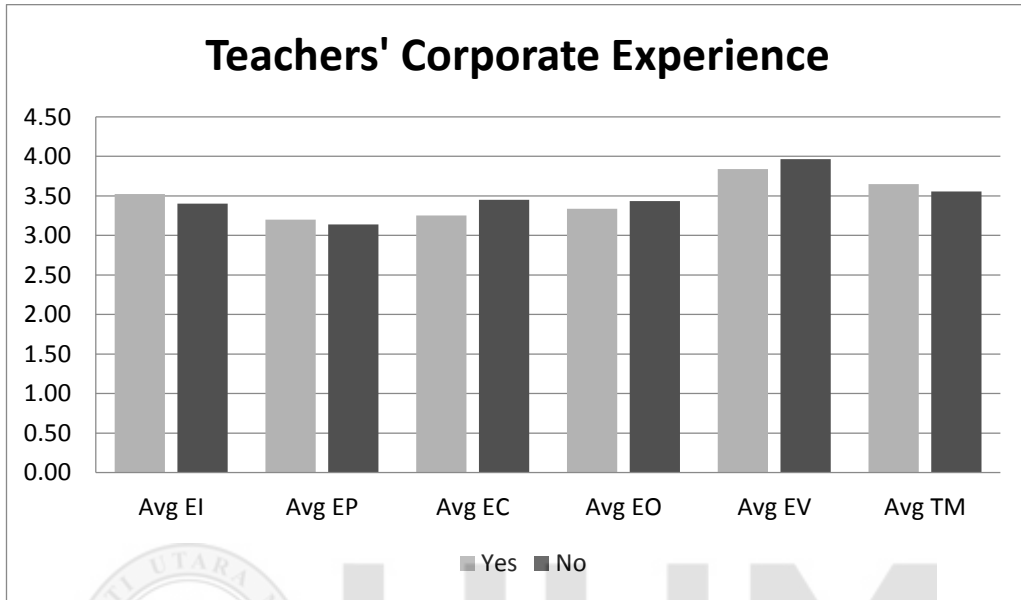
	EI	EP	EC	EO	EV	TM
Yes	3.59	3.19	3.24	3.34	3.87	3.60
No	3.19	3.17	3.50	3.42	3.85	3.71



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### Teachers' Corporate Experience

	EI	EP	EC	EO	EV	TM
Yes	3.52	3.20	3.25	3.34	3.84	3.65
No	3.40	3.14	3.45	3.43	3.96	3.56



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