

Does age make difference amongst the angel investors?

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Abstract

Indian start-ups are growing fastest nowadays and obtained acclamation for being the 3rd largest start-ups economy. Studies on start-ups have compared different types of investors naming angel investors, venture capitalist, banks etc., in various perspectives. However, studies analysing the intra-investors features especially amongst the angel investors in terms of their characteristics, investment pattern and risk management strategies are sparse. Further, studies on angel investors of Indian economy is very less. This paper attempts to meet the gap in researches by analysing the differences amongst angel investors in Indian context. This is an earliest study to analyse whether the angel investors of different types are homogeneous in terms of their age or not. This study further explores the influences angel investor's age in their investment decisions and risk-taking ability. Parametric statistical tests were used to analyse 1243 angel investments made in Indian start-ups during the period 2014-2018. Findings of the study shows that the angel investors belong to different education level, occupational background, domicile, industrial experience, functional area experience, investment experience are *heterogeneous in terms of their age*. It is found that the angel investors living in metro cities holding post-graduation and above, working in corporate/academic sector with general management expertise and having investment experience of 11-15 times are appear to be significantly older than their other counterparts. A positive correlation found between age of investors and start-ups shows that the *elder investors are more risk-averse in nature* and tend to invest in well-established firms than early stage ones.

Keywords – Start-ups, Investments, Angel investors, Age, Government.

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Introduction:

Start-ups play an important role in enhancing economic growth and standard of living of the country. India has been declared as world's fastest growing major economy by IMF with a projected growth rate of 7.4% and 7.8% in 2018 & 2019 respectively (6.7% in 2017) as against the stable global growth rate at 3.9%. Further, India is expected to be most populous country by 2024 and will remain as the younger nation till 2040. This demographic dividend along with increase in use of internet portrays the nation as an under-penetrated consumer driven market with large scope for entrepreneurial growth and investment opportunities. The launch of 'Startup India – Standup India' scheme by Government of India in the year 2016, successful attainment of 100th position amongst 190 countries (against 130th rank in 2017) in doing business with easiness and smoothness has ignited the entrepreneurship in India. India secured the position of 3rd largest start-ups economy in the world with 3100 start-ups in 2014 and projected to have 11,500 start-ups by the year 2020 which shows a demand for multi-fold increase in equity investment. According to EY the companies at very early stage of their development are facing difficulties in getting external funding as the viability of the venture was not proven. At the start-up stage, though the commercial viability is getting demonstrated it is considered as a high-risk investment as the management team and business model remains unproven. In Indian scenario, the mortality rate of the start-ups incepted during 2012-2017 is about 20-25% and 40-45% of failed start-ups were died before securing the seed stage funding (NASSCOM, 2017). This again proves the existence of equity gap in the seed stage and need for active and prominent participation of angel investors at the seed stage of start-ups. This has developed the interest on the angel investor as the unit of analysis.

1. Objective and structure of the paper

As mentioned by Wright et al (1998), a complete understanding of the differences in personality, attitude and performance of the angels is required in order to attract the potential investors. Although the start-up sector and angel investment has grown up, the researches on angel investment has been sparse. Existing literatures are giving a good picture on the angel investor's profile like age, gender, education, experience, quantum of investment, holding period, frequency of investment, syndication type, location preference etc., especially in developed economies like Australia, USA (Angel Capital, Benjamin and Margulis), Scotland (Stuart Paul et al., 2003). The Indian angel market is relatively under-researched except (Sabarinathan, 2014) who matched investment activity, examined investment approaches and compared the same with individual and other types of angels. Further, there is scant research that explains the various characteristics of angels and differences amongst the angel investors. Very few literatures were analysed the differences in the investor's characteristics amongst various type of angel investors (Maula, Autio, & Arenius, 2005), (Van Osnabrugge, 1998), (Wong & Ho, 2007), (Erikson & Sørheim, 2005). By building on above-said works and by inducing investor's education level, field of education, occupational background, location and investee's industrial sector, business model, status of incubation/acceleration, location

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variables additionally, we examine the differences amongst angel investors in depth. More specifically, this paper makes an attempt to analyse whether investor's age makes differences amongst angel investors of various categories. The findings will be useful for the entrepreneurs to equip themselves to cater to the needs of angel investors and mobilise investments, angel investors to improve their risk management strategies in future and policymakers to influence the flow of angel investments to the highly risky and underinvested areas.

Rest of the paper is structured as follows. The next section provides a brief overview of the literature. The section following it identifies the research gaps to build hypothesis. The subsequent section contains description of data, its sources, and the methods of analysis. The results and findings are discussed in the section following. The last section summarizes, concludes and brings out the policy implications, limitation and scope for further studies.

Literature review

Past research on the angel investment can be broadly classified into the following categories: Funding stages of start-ups (Harrison & Mason, 2007; HV et al., 2016; NASSCOM, 2017; Role & Angel, 2011). Role of angels as an important source of funding for start-ups ((Sohl, 1999; Mason and Harrison, 2000; Kotha and George, 2012; Van Osnabrugge, 2000; Madill et al., 2005; Manigart and Wright, 2013); Different types of angles (Coveney and Moore, 1998; (Maula et al., 2005; Van Osnabrugge, 1998); factors determining the investment decisions; Potential risks faced by angel investors while investing in start-ups and its management.

Funding stages of start-ups : While early stage start-ups rely on angel investors and seed funding, successive level firms depends on venture capitalist and the late stage start-ups that are inactive / aggressive expansion stage will look for private equity funds together with public markets (HV et al., 2016). Building on Sohl's categorisation of start-up stages based on investment size (Sohl, 1999), NASSCOM has redefined it as Seed Stage - less than \$1 Mn; Early Stage -\$ 1 - \$5 Mn; Growth Stage - \$ 5 - \$ 20 Mn and Expansion Stage - Above \$20 Mn (NASSCOM, 2017).

Role of angels as an important source of funding for start-ups *Angel investors*, who are often experienced entrepreneurs or business people, have become increasingly recognised as an important source of equity capital at the seed and early stage of company formation (Harrison & Mason, 2010). They are willing to invest in venture that has high potential risk, unproven track record and facing funding difficulties (Keane, Ryan, & Cunningham, 2005; (Role & Angel, 2011, Van Osnabrugge and Robinson, 2000). They make typical investment size of \$25,000 to 500,000 in early stage and are expected to fill the

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equity gap between \$500,000 to 3 million by forming groups and syndicates, increasing the total deal size (Role & Angel, 2011).

Different types of angel investors Previous literatures have categorised investors from 2 to 10 types based on levels of investment activity, entrepreneurial background, competence, affiliations, familiarity and relationship with entrepreneurs, gender etc., viz Serial angels & Non serial angels (Van Osnabrugge, 1998); Male angels and Female angels (Sohl et. al. 2004), (Mason and Harrison, 2007); Family investors & Non family investors (Maula et al., 2005); Lotto, Traders, Analytical & Business Angels (Sorheim and Landstrom, 2001); Corporate, Entrepreneurial, Enthusiastic, Micro-managers & Professional (Evanson, 1998); Godfather, Peers, Cousin Randy, Dr. Kildare, Corporate achievers, Daddy Warbucks, High-tech angels, Stockholder & Very hungry angels (Gaston, 1989).

Factors determining angel investor's investment decisions Previous literatures have identified various factors that influence the investments in start-ups such as, having business skills, seeing opportunities, and knowing an entrepreneur (Szerb, Rappai, Makra, & Terjesen, 2007); entrepreneurial experience, start-up skills, and knowing entrepreneurs (Wong & Ho, 2007), (Hindle, K. and L. Lee, 2002); impact made by the entrepreneur at the first meeting (Paul et al, 2007); Location (Brush, Edelman, & Manolova, 2012; Harrison & Mason, 2010); heuristics (Maxwell, Jeffrey, & Lévesque, 2011); strength of the management team (Murnieks, Sudek, & Wiltbank, 2015).

Potential risk faced by angel investors in investing in start-ups and its management Many literatures have discussed different types of risk faced by the angel investors such as Relationship Risk and Performance Risk (Söderblom et al., 2016); Agency risk, Market risk and Execution risk (Carpentier & Suret, 2015); Relational risk / agency risk (Das and Teng 1998, Fiet, 1995) ; Technical risk; Market risk ; Policy risk ; Finance risk and Market risk (Polzin, Sanders, & Stavlöt, 2018). But the researches that look into various types of investment patterns and the determinants of high risk and low-risk perception of the angel investments in Indian context is not yet seen. One of the consistent findings of the previous researches is that the angels experienced losses less frequently and substantial gains more frequently, than did other categories of informal investor (Riding 2008). This denotes the meticulous efforts taken by them in selection of right investment both at Pre-investment stage and post-investment stage.

Having considered the work delivered by previous literatures, it is found that none of them have attempted to find whether age of investors makes significant differences amongst the angel investors. This study will be the first attempt to study prevalence of differences in the age of various types of angel investors in Indian context.

Data sources, description and methodology

The growth of Indian start-up economy to 3rd largest in the world in 2014, its prodigious growth both in terms of number of start-ups and amount of angel investment in 2015 and a sharp decline in start-up's expansion pace in 2016 attracts a detailed study of this industry growth in its various dimensions. This study uses the angel investment transaction took place in India during 4 year period from 2014 to 2018 which is considered to be a reasonable time frame to overcome the yearly fluctuations. The data for the study was obtained from multiple sources such as Venture Intelligence, VCCEdge, The Chennai Angels, Keyur Forum and Dealcurry database were cleaned and merged with the personal details of investors were taken from the websites to build a comprehensive dataset. Admittedly, with the lack of a strong database on Indian investments, developing such a dataset involved a lot of effort. The comprehensive data set that was developed consist of 3374 companies, of which 1538 non-funded companies, non-angel funded transactions, and those without investor's information were removed. Finally, 1243 angel investment transactions took place in the above said period has been used for this study.

Table 1 provides the descriptive statistics for the data sample. The age of the angel investors varies from 22 to 70 years. The frequency of the investments made by an investor ranged from 1 to 20 times during the relevant period. Consistent with many studies, a typical angel of Indian start-ups is likely to be male, highly educated, lives in metro cities, investing in technology followed by financial sectors. Further, it may be noted that they have studied business management at well reputed educational institutions, prone to invest along with other angels and are having 5 or fewer investments during the period of relevance. As expected, youngest investors were invested in Technology, Consumer Goods, Industrials and Utilities sector whereas the oldest investors have invested in Financials and Healthcare sectors. Further, the frequency of investment was also differed among the investors, i.e the oldest investors had only one-time investment whereas the youngest have made 1 – 2 times during the period of relevance.

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Table 1: Descriptive Statistics

		Age (in years)	Gen der *	Curr ent Back grou nd*	Indu stry Expe rtise *	Funct ional area Expe rtise*	city clas sific atio n *	Educ ation (high est) *	Stre am of stud ies *	Type of the Insti tute *	Invest ment Exp. (in No.)	Invest ment Exp. (Code d) *
N	Valid	1235	124 3	1243	1243	1243	124 3	1234	124 1	1241	1243	1243
	Missi ng	8	0	0	0	0	0	9	2	2	0	0
	Mean	44.94	1.0 2	2.56	8.22	7.26	1.7 2	1.80	3.50	2.31	5.17	1.55
	Median	44.00	1.0 0	3.00	9.00	9.00	1.0 0	2.00	4.00	2.00	3.00	1.00
	Mode	47	1	4	10	9	1	2	4	1	1	1
	Std. dev	9.369	.13 2	1.44 3	2.21 1	2.975	1.2 38	.698	1.08 7	1.38 9	6.003	.979
	Minimu m	22	1	1	1	1	1	1	1	1	1	1
	Maximu m	70	2	6	11	10	4	4	7	4	30	4

(Note : * are categorical variables)

Methodology: The data collected were analysed to verify statistically significant differences between different types of investors, by using SPSS software. The independent sample 't' test and one -way ANOVA test were used to compare the mean difference between 2 groups and 3+ groups respectively. The assumptions of the test were carried out to confirm the fitness of the data for analysis. The assumptions of independent observations, the absence of outliers were tested. Since the sample size was adequately large the compliance with normality was relaxed. Further due to the realistic nature of the data, the group sizes are sharply different and hence the homogeneity of variances was tested with Levene's test. Since unequal variance was found among the groups, Games-Howell test was used under post hoc test. We study this in greater detail in the next section.

Research questions and hypothesis:

Besides providing descriptive statistics of angel investors of Indian start-ups, this paper attempts to study the differences in the investor characteristics amongst various types of angel investors. Further, this study seeks to analyse the investment pattern emerged from various type of angel investors and whether there is any significant difference in the investment pattern and risk management behaviour of various angel investors.

1. Comparing the differences in the mean age amongst various types of angel investors

Gender

In many countries, women are underrepresented in the angel market. 99% in the UK (McKaskill, 2009), 97 % in Norway (Reitan and Sorheim, 2000); 90% of angels in Singapore (Hindle and Lee, 2002) are male investors. Emerging economies are having a higher composition of female angel investors, 22% in China, 26% in Thailand (Ding, Sun, & Au, 2014). This study found that 98% of the angel investors of Indian start-ups are male. It may be speculated that the age of the females may create significant differences among the investors grouped on gender.

Hypothesis 1: There are no significant differences between male and female investors in terms of their age.

Education

The theory of planned behaviour suggests that education increases the likelihood of informal investing. The education induces a greater level of confidence, analytical power, self-efficacy and volition. Portfolio studies (Guiso et al., 2002) and demographical studies of angel investors prove that the angel investors are highly educated (Aram, 1989; Freear et al., 1994) and the same was observed in this study too, as shown earlier in Table 1 . It may be speculated that higher level education might give decision making skill at a younger age of investors.

Hypothesis 2: There are no significant differences amongst the angel investors of different education level in terms of their age.

Stream of Education

The cognitive skills and knowledge developed on the students of business management will enable them to have analysed the investment from various angles and choose the best investment at their younger age. There may be a significant difference among the investors studied different streams of education in terms of their age.

Hypothesis 3: There are no significant differences in the age of angel investors who belong to different streams of education

Occupational Background

Ajzen's theory of planned behaviour (1988, 1991) explains that the entrepreneurial and managerial experience of an investor gives a greater level of confidence to them that they can identify a potential investment and contribute to the betterment of the investee company. This confers that people who got employment or commenced their own

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company in younger age might be willing to invest in new start-ups at a younger age.
Hypothesis 4: There are no significant differences amongst the angel investors of different occupational background in terms of their age.

Industrial Expertise

The Skill Acquisition Theory, which was developed based on Adaptive Control of Thought model (ACT) propounds that adults commence learning something through mainly explicit processes, and, through subsequent sufficient practice and exposure, proceed to implicit processes (Vanpatten & Benati, 2010). This gave a clue to this study to group the angel investors based on their industrial expertise which classifies the investors into technology, finance and various traditional sectors.

Hypothesis 5: There are no significant differences amongst the angel investors of different industrial expertise in terms of their age.

Functional area of operation

Drawing upon the planned behaviour theory the people with more managerial expertise will have a higher perception of behavioural control and high confidence in selecting the right investment. This is consistent with the findings that individuals with entrepreneurial and managerial experience have higher propensity to become informal investors (Wong & Ho, 2007).

Hypothesis 6: There are significant differences amongst the angel investors of the different functional area of operation in terms of their age.

Location of investors

Anitha, 2000 has stated that Lifestyle has a significant positive influence on purchase decision and Kucukemiroglu, (2005) has stated that lifestyle segmentation is very much essential due to the impact created by it on the decision-making capacity of each individual. The lifestyle of metro cities and other city's residents varies tremendously.
Hypothesis 7: There are no significant differences in the investor's age of the angels living in different geographical locations.

Investment Experience: The theory of planned behaviour (Ajzen, 1988 and 1991) demonstrates that the skill acquired through experience of an individual gives more self-efficacy and volition to their decision-making skills. Van Osnabrugge in his study (Van Osnabrugge, 1998) has found that the serial angels with more investment experience are having characteristics of being entrepreneur, having previous experience in same industry sector, prefer to co-invest etc., It may be speculated that age might have a significant difference amongst the investors with different level of investment experience.

Hypothesis 8: There are significant differences in the age of angel investors of different levels of investment experience.

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Investment Style:

The Social Capital theory explains that when effectively leveraged by individuals, social capital provides them with considerable resources to facilitate the identification, evaluation and exploitation of opportunities (Aldrich and Zimmer, 1986). As young and elder investors perceived to have lesser control than the middle-aged investors, following the theory of planned behaviour it is expected that young and aged investors prefer to make investments in syndication than the high risk bearing middle-aged angel investors. Hypothesis 9: There are significant differences in the age of angel investors practising different styles of investment (individual or syndicated investments).

Age of the Start-ups:

Investments in very young aged start-up firms are associated with a higher level of perceived risk due to their unproven track records, business model and assets. As per theory of planned behaviour, the perceived behavioural control is expected to be high among the middle-aged investors than those of young and aged investors. This control is inclined with their income earning capacity, level of disposable income, their perceived ability to carry out adequate due diligence and render value-added support/services to the start-ups. The perceived control renders higher risk tolerance level which in turn triggers the investors to invest in young aged start-up firms.

Hypothesis 10: There are significant differences in age of angel investors who are making investments in young and well-established of start-ups.

Data analysis, Results and Discussions:

An independent sample 't' t-test and One-way Analysis of Variance (ANOVA) was used to compare the mean age of angel investors among 2 and more than 2 groups of independent variables respectively. The results are detailed below:

1. Mean comparison between the angel investors of different gender

Gender	Variable – Age			Df	t Statistic	P Value
	N	Mean	Std. Deviation			
Male	1213	44.96	9.387	1234	0.626	0.538
Female	22	43.82	8.449			
Total	1235	45.00	9.528			

The test results shows that the male angels are relatively older (M = 44.96, SD = 9.387) than the female angel investors (M = 43.82, SD = 8.449), $t(1234) = 0.626$, $p = 0.538$. It is found that there are no significant differences among them in terms of their age.

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2. Mean comparison between the angel investors of different education levels

Table 3 : Comparison between the angel investors belonging to different educational levels

IV - Educational Qualification	DV – Age			df	F Statistic	P Value	Games - Howell test : Mean Difference (I-J)				
	N	Mean	Std. Deviation				1	2	3	4	
(1) Upto UG	399	43.81	8.869	3, 1224	5.544	0.001 ***		-1.767*	-4.034*	1.140	
(2) Post Graduation	734	45.57	9.639						-2.267	-2.907	
(3) Professionals	44	47.84	8.863								5.174*
(4) Ph.D holders	51	42.67	7.994								
Total	1228	44.96	9.357				*. The mean difference is significant at the 0.05 level.				

Note : ***, ** indicates significance at 1, 5% level respectively

The ANOVA of angel investor's age revealed a statistically significant main effect, $F(3,1224) = 5.544$, $p < .01$, indicating that not all groups of investors had the same mean age. Post hoc comparison, using the Games-Howell post hoc procedure indicate that the less educated angel investors i.e upto UG ($M = 43.81$, $SD = 8.869$) had a significantly lower mean age than the Post graduated angels ($M=45.57$, $SD = 9.639$) and Professional angels ($M = 47.84$, $SD = 8.863$). Further angel investors with Ph.D qualification ($M = 42.67$, $SD = 7.994$) had significantly lower mean age than the professionally qualified angel investors.

3. Mean comparison between the angel investors belonging to the different field of studies

Table 4 : Comparison between the angel investors belonging to different field of studies

Field of study	DV – Age			df	F Statistic	P Value
	N	Mean	Std. Deviation			
1) Arts and Humanities	96	45.04	9.486	6, 1228	1.487	0.179
2) Science	44	44.32	9.929			
3) Technology & Engineering	370	44.08	9.221			
4) Business Management	674	45.50	9.295			
5) Medicine	2	52.00	25.456			
6) Legal	17	41.65	8.208			
7) Others	32	44.94	10.644			
Total	1235	44.94	9.369			

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The analysis showed that the effect of different streams of education on the age of the investors was not so significant, $F(6, 1228) = 1.487, p = 0.179$.

4. Mean comparison among the angel investors with a different occupational background

Table 5 : Comparison between the angel investors of different occupational background

IV - Occupational Background	DV – Age			df	F Stat.	p Value	Games - Howell test : Mean Difference (I-J)									
	N	Mean	SD				1	2	3	4	5	6				
1) Entrepreneur	535	44.07	8.376	5, 1229	7.443	0.000**		2.708	1.194	-2.180*	-9.240*	-	.933			
2) Professional	39	41.36	11.087								-1.515	-4.888	-11.949*	-	3.641	
3) VC/PE	103	42.87	9.535										-3.373*	-10.434*	-	2.126
4) Corporate / Employed	542	46.25	9.828											-7.060		1.247
5) Academician	13	53.31	9.331													8.308
6) Others (Student etc.,)	3	45.00	14.526													
Total	1235	44.94	9.369				*. The mean difference is significant at the 0.05 level									

Note : ***, ** indicates significance at 1, 5% level respectively

The ANOVA of angel investor's age revealed a statistically significant main effect, $F(5,1229) = 7.443, p < .01$, indicating that not all groups of investors had the same mean age. Post hoc comparison, using the Games-Howell post hoc procedure indicate that the angel investors who have employed in corporate sector ($M = 46.25, SD = 9.828$) had a significantly higher mean age than the angel investor with entrepreneurial experience ($M = 44.07, SD = 8.376$) and those are involved in VC/Per sector ($M = 42.87, SD = 9.535$). Further angel investors who are basically academicians ($M = 53.31, SD = 9.331$) had significantly higher mean age than the angel investor with entrepreneurial experience, professional practitioners and belong to VC/PE sectors.

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5. Mean comparison among the angel investors belonging to different industrial sectors

Table 6 : Comparison between the angel investors belonging to the different industrial sector

IV - Industrial Sector	DV – Age			Std. Error	Df	F Statistic	P Value
	N	Mean	Std. Deviation				
Oil and Gas	1	34.00			10,1224	2.215	0.015*
Basic Materials	6	39.67	7.685	3.138			
Industrials	43	44.23	11.735	1.790			
Consumer goods	21	41.90	8.660	1.890			
Healthcare	60	42.78	9.730	1.256			
Consumer services	267	43.79	9.136	0.559			
Telecommunication	37	43.38	8.548	1.405			
Utilities	6	48.50	16.294	6.652			
Financials	334	45.37	9.110	0.498			
Technology	340	46.21	8.872	0.481			
Others	120	45.19	10.352	0.945			
Total	1235	44.94	9.369	0.267			

Note : ***, ** indicates significance at 1, 5% level respectively

The ANOVA of angel investor's age revealed a statistically significant main effect, $F(10, 1224) = 2.215, p < .05$, indicating that not all groups of investors had the same mean age at 5% level of significance. Post hoc test was not performed for age since oil and gas category had fewer than two cases.

6. Mean comparison among the angel investors belonging to different functional area

Table 7 : Comparison between the angel investors belonging to different functional area of working

IV - Functional Area	DV – Age			Std. Error	Df	F Statistic	P Value
	N	Mean	Std. Dev.				
HR & Admin	128	47.46	7.829	0.692	9,1225	2.251	0.017**
Production & Materials Mgmt. /Operation	36	42.86	10.240	1.707			
Sales & Marketing	12	43.00	9.145	2.640			
Finance	154	44.40	9.030	0.728			
Strategy	14	40.29	13.176	3.521			
Monitoring	6	46.50	7.477	3.052			
IT & Systems	13	40.15	4.220	1.170			
Legal	19	44.42	9.209	2.113			
General Management (CXO)	767	45.03	9.384	0.339			
Others	86	44.00	10.835	1.168			
Total	1235	44.94	9.369	0.267			

Note : ***, ** indicates significance at 1, 5% level respectively

The ANOVA of angel investor's age revealed a statistically significant main effect, $F(10, 1224) = 2.215$, $p < .05$, indicating that not all groups of investors had the same mean age at 5% level of significance.

Table 7b : Multiple comparisons of mean age among various types of angels

Functional Area	Games - Howell test : Mean Difference (I-J)									
	1	2	3	4	5	6	7	8	9	10
1) HR & Admin		4.60	4.46	3.06	7.18	0.96	7.307*	3.04	2.43	3.46
2) Production & Materials Mgmt. / Operation			-0.14	-1.53	2.58	-3.64	2.71	-1.56	-2.16	-1.14
3) Sales & Marketing				-1.40	2.71	-3.50	2.85	-1.42	-2.03	-1.00
4) Finance					4.11	-2.10	4.24	-0.02	-0.63	0.40
5) Strategy						-6.21	0.13	-4.14	-4.74	-3.71
6) Monitoring							6.35	2.08	1.47	2.50
7) IT & Systems								-4.27	-4.872*	-3.85
8) Legal									-0.61	0.42
9) General Management (CXO)										1.03
10) Others										

*. The mean difference is significant at the 0.05 level.

Post hoc comparison, using the Games-Howell post hoc procedure indicate that the angel investors who are from IT & system sector (M = 40.15, SD = 4.220) had a significantly lower mean age than the angel investor from HR & Admin field (M = 47.46, SD = 7.829) and general management area (M = 45.3, SD = 9.384).

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7. Mean comparison among the angel investors living in different locations

Table 8 : Comparison between the angel investors belonging to different residential areas							Games - Howell test : Mean Difference (I-J)			
IV - City Tiers	DV - Age			df	F Statistic	P Value	1	2	3	4
	N	Mean	Std. Deviation							
1) Metro (India)	903	45.52	9.147	3, 123 1	4.793	0.003 ***		.241	2.773	2.263*
2) Tier 2 (India)	29	45.28	11.922						2.532	2.022
3) Tier 3 (India)	43	42.74	12.343							-510
4) Abroad	260	43.25	9.053							
Total	1235	44.94	9.369							
<i>Note : ***, ** indicates significance at 1, 5% level respectively</i>							<i>*. The mean difference is significant at the 0.05 level.</i>			

The ANOVA of angel investor's age revealed a statistically significant main effect, $F(3,1231) = 4.793$, $p < .01$, indicating that not all groups of investors had the same mean age. Post hoc comparison, using the Games-Howell post hoc procedure indicate that the angel investors who lived in Indian metro cities ($M = 45.52$, $SD = 9.147$) had a significantly higher mean age than the angel investor living in foreign countries ($M = 43.25$, $SD = 9.053$).

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8. Mean comparison among the angel investors belonging to different levels of investment frequencies

Table 9 : Comparison between the angel investors of various frequencies of investments							Games - Howell test : Mean Difference (I-J)			
IV - Frequency of Investments	DV - Age			df	F Statistic	P Value	1	2	3	4
	N	Mean	Std. Deviation							
1) Upto 5 times	871	44.75	9.650	3, 123 1	13.51 5	0.000* **		2.77 4*	- 3.616 *	- 3.117 *
2) 6 -10 times	160	41.98	9.162						- 6.390 *	- 5.891 *
3) 11 - 15times	85	48.36	5.440							.499
4) > 15 times	119	47.87	8.240							
Total	123 5	44.9 4	9.369							
<i>Note : ***, ** indicates significance at 1, 5% level respectively</i>							<i>*. The mean difference is significant at the 0.05 level.</i>			

The ANOVA of angel investor's age revealed a statistically significant main effect, $F(3,1231) = 13.515$, $p < .01$, indicating that not all groups of investors had the same mean age. Post hoc comparison, using the Games-Howell post hoc procedure indicate that the angel investors who have invested upto 5 times (i.e less frequency) ($M = 44.75$, $SD = 9.650$) had a significantly higher mean age than the angel investor with 6-10 times of investments ($M = 41.98$, $SD = 9.162$) and had a significantly lower mean age than the angel investors with 11-15 times of investments ($M = 48.36$, $SD = 5.44$) and above 15 times of investments ($M = 47.87$, $SD = 8.24$). Further angel investors with 11-15 times of investments and above 15 times of investments had significantly higher mean age than the angel investor with 6-10 times of investment.

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9. Mean comparison among the angel investors investing in different age groups of start-ups

Table 11 : Comparison between the angel investors invested in start-ups of different age groups.							Games - Howell test : Mean Difference (I-J)				
IV – Age of Startups (months)	DV – Age			df	F Statistic	P Value	1	2	3	4	5
	N	Mean	Std. Dev.								
<20	734	44.26	8.877	4, 122 5	3.770	0.005 ***		-	-	-	-
21-40	343	45.92	10.241					1.651	1.361	3.587	11.736*
41-60	104	45.63	10.262						0.29	-	10.085*
61-80	47	47.85	10.575							-	10.375*
> 80	2	56.00	0.000								-8.149*
Total	1230	45.00	9.502								
<i>Note : ***, ** indicates significance at 1, 5% level respectively</i>							* . The mean difference is significant at the 0.05 level.				

The ANOVA of angel investor's age revealed a statistically significant main effect, $F(4,1225) = 3.770$, $p < .01$, indicating that not all groups of investors had the same mean age. Post hoc comparison, using the Games-Howell post hoc procedure indicate that the angel investors who invested in well-established start-up companies which are more than 80 months old ($M = 56.00$, $SD = 0.000$) had a significantly higher mean age than all other angel investors.

Discussions, Policy implications and Conclusion:

Many studies showed average age of USA angel investors as 46-60 years, Australia as less than 40 (Harding, 2000), Argentina angels as over 30 years (Pereiro, 2001) and this study shows an average age of 45 years and no significant difference among the male and female angel investors in terms of their age. The data also suggest that the angel investors of Indian start-ups are highly educated i.e 68% of the investors are possessing either post-graduation or higher level qualifications which is consistent with the findings of many studies that the angels are well educated. Further, this study shows that the postgraduate and professional investors are quite older than the investors with undergraduate qualifications.

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Many studies demonstrated that there is a positive relationship between an individual's entrepreneurial experience and informal investment (Maula et al., 2005), following the theory of planned behaviour (Ajzen, 1988). This study deciphered the occupational background in a more detailed way and found that the investors with entrepreneurial, VC/PE sector experience are younger than the investors from academic, corporate / employment sector. Further professional practitioners are younger than the investors with an academic background. While considering industrial experience (Huang, Wu, Lee, & Bao, 2017) found that 51% of angel investors are having 'technology' background which is another trait of a male-dominated industry. Our study goes beyond mere technology and non-technology sectors and has adopted ICB industrial classifications, which is a recognised standard worldwide for categorising companies and found that there is a significant difference across the investors of different industrial experiences in terms of their age. The investors belong to technology, finance and utilities are older than the investors from healthcare, consumer services, consumer goods, basic materials etc., In addition, the data also explains that the investors working in IT and Systems area are quite younger than the investors working in HR & Administration and General Management areas.

While considering the city of the living, the majority of the angels are concentrated (73%) in the metro cities of India and are found to be significantly older than the investors living abroad. The investor in tier 2 and 3 cities merely account for 2 and 3% respectively which shows the availability of a conducive environment for the angel investors in metro cities only. This kind of unique geographical distribution of angel investors invites the Governments to develop strong and supportive policies for the angels to flourish across the regions to check out the geographical imbalances. Further, the entrepreneurs should also seek for new and encouraging angels from their own areas rather than rely on the angels in metro cities and abroad.

The younger investors (M=41) are adopting an aggressive strategy to build their portfolio upto 10 times and the older investors are seems to be better managers of investments beyond 10 times. An increasing positive relationship was found between age of investors and age of start-up companies. This shows that the investors have become more cautious as they grow and elder investors are more risk-averse than younger investors.

In summary, the findings of the study show that the angel investors belong to different education level, occupational background, domicile, industrial experience, functional area experience, investment experience are *heterogeneous in terms of their age*. It is found that the angel investors living in metro cities holding post-graduation and above, working in corporate/academic sector with general management expertise and having investment experience of 11-15 times appear to be significantly older than their other counterparts. A positive correlation found between age of investors and start-ups shows that the *elder investors are more risk-averse in nature* and tend to invest in well-established firms than early stage ones.

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