DEMOGRAPHICAL INFLUENCE IN COPING WITH WORK STRESS IN THE IT SECTOR

Sindhu Shantha Nair

Abstract: **The purpose of this study was to find the influence of demography (Age) in coping with work stress in the IT sector. The study aims to understand if age is being a better influencer for coping mechanisms under stress in the sector. The demography factor of age can be a influencer then senior officials ought to have effective coping mechanisms and they can train the juniors to develop the same. The study was conducted in Bangalore, in the IT Sector. The study was conducted over a period of three months and analyzed using quantitative method.**

Keywords: **IT sector, Demography, work stress, age**

Introduction

Work stress in IT sector is always high with the ever demanding job requirements, evolving technology, heavy competition inside the organization and externally across the globe. The ever evolving technology demands skill development and certification on a continuous basis, which in itself is highly stressful. To keep up with the global competition, organizations have to innovate continuously which is an added stress. Ambiguity of the projects, loss of jobs and uncertainty exists on a higher level in the IT sector. Layoffs and lack of projects or delayed projects due to which staff are benched is also common in the sector. Students who have done core engineering subjects, other courses in humanities, science and arts also join the IT sector for software jobs. Hence there is a mixed group of employees from different background. Cultural diversity also exists. So along with the work stress, other stressors of adjusting to the work environment also exist among employees.

Review of Literature

Work stress predicts poor mental health and prolonged conditions may contribute psychosomatic illnesses (Parkes, 1990; Phelan et al. 1991; Bromet et al., 1992; Stansfeld et al., 1997, 1999; Niedhammer et al., 1998; Mausner-Dorsch& Eaton, 2000; Tennant 2001; Paterniti et a., 2002). NIOSH (1999) and Eurofound (2005) stated that in the USA and the EU, 30 to 40 % of workers face work stress and the rates are continuously increasing from the year 1990. Kim-Cohen et al., noted that those who experience depression and anxiety disorders in childhood are at a greater risk of psychiatric disorder in adulthood. Mayer and Salovey (1997) stated that age influences emotional maturity and as age advances, emotional maturity also advances. Extremera eta al (2006), Kafetsios (2004) and Ishak et al. (2013) opined that the difference in the age and ethnicity will affect the psycho graphical measures. Freedman (2008) established a positive correlation between age and emotional maturity. Whilst Arani (2011) noted that age does not influence work satisfaction and emotional maturity.

Objective

Based on this, the hypothesis is framed as H_0 = Age has no effect on coping styles.

Research methodology

The study was carried out in Bangalore IT sector using convenience sampling. A sample size of 250 employees was surveyed on a questionnaire and assessed using Likert scale. The five point Likert scale used strongly agree, agree, neutral, somewhat agree and disagree as measures. The one way analysis of variance in IBM SPSS was used to analyze the influence of age on coping mechanism. Age is the independent variable and coping the dependent variable

Analysis, Findings and Discussion

The internal consistency of the data was tested using Chronbach's Alpha. Alpha value between $0.9 > \alpha \geq 0.8$ (Table 1) indicate adequate level of internal consistency.

Table 1; Reliability

	Reliability	
	Chronbach's Alpha	Number of items
Coping	0.878	50

Employees in the IT sector in Bangalore who is working as full time employees with age more than 25 years with at least one year of experience is considered for the study.

Table 2; Descriptive statistics was used to understand the respondent characteristics of employees.

Demography	Criteria	Frequency	Percentage
Age	25 - 29	5	11	5
	30 - 34	4	9	1	9
	35 - 39	4	9	1	9
	40 - 44	5	1	2	2
	> 45	5	0	2	5
Total		2 50	1 0 0

The sample had 15 % of employees between the age of 25 to 29 years, 19 % between 30 to 34 years of age, and 19 % between 35 to 39 years of age, 22 % between 40 to 44 years of age, and 25 % above the age of 45 (Table 2 and Figure 1).
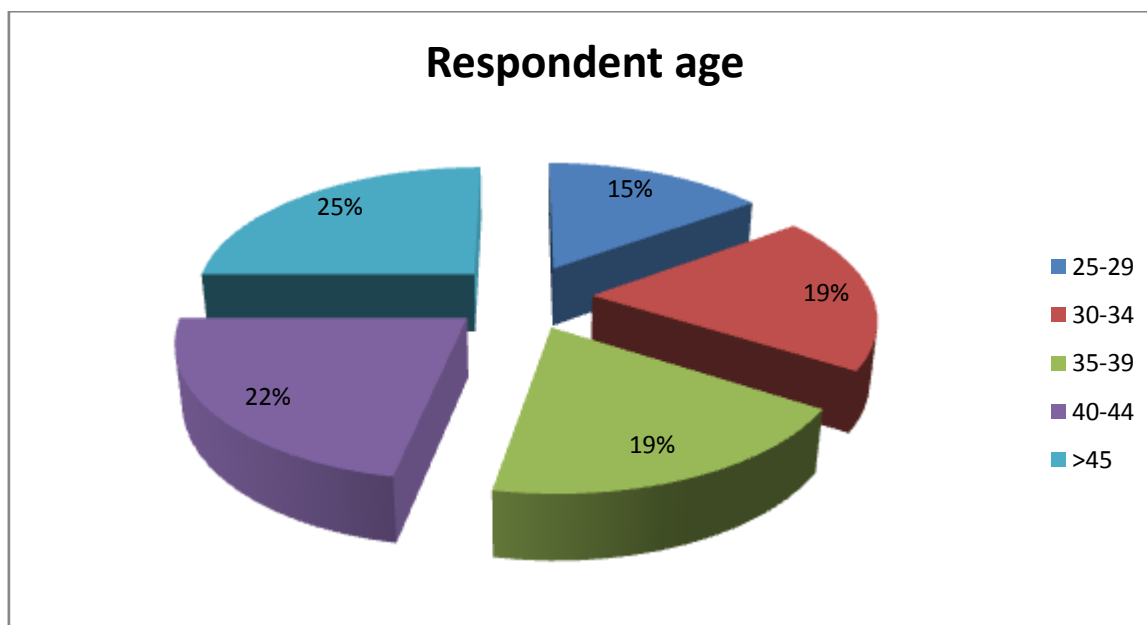

Figure 1; Respondent Age

Source: Primary data and MS Word Chart

Demographical influence of Age on coping mechanism was studied using one way analysis of variance in IBM SPSS.

Table 3; ANOVA on Age

Coping style		Sum of Squares	df	Mean Square	F	Sig.
Proactive planning	Between Groups	28.088	4	7.022	10.098	.000
	Within Groups	170.373	245	.695		
	Total	198.461	249			
Positivity	Between Groups	20.967	4	5.242	9.670	.000
	Within Groups	132.805	245	.542		
	Total	153.772	249			
Disengagement	Between Groups	8.786	4	2.196	3.311	.000
	Within Groups	162.545	245	.663		
	Total	171.331	249			

This test compares means of three or more samples using F statistics. The analysis of variances showed that age influenced coping styles. Proactive planning $F_{(4, 245)} = 10.098$, Positivity $F_{(4,245)} = 9.670$, Disengagement, $F_{(4, 245)} = 3.311$.

This enables the study to reject the null hypothesis ($H_{0=}$ Age has no effect on coping styles)and arrive at the conclusion that age does affect coping styles.

Multiple Comparisons

The age groups of 40 to 44 years of age and greater than 45 years of age are highly conscious about proactive planning as a coping style (Table 4) compared to age groups of 35-39, 30-34, and 25-29. There is only a less difference in proactive planning between the age groups of 35-39 and 30-34Table 4 Post Hoc Test – Age and Coping style (Proactive Planning).

Table 4 Post Hoc – Age and coping style (Proactive Planning)

Dependent Variable	Age(I)	Age(J)	Mean Difference (I-J)	Std. Error	Sig.
Proactive Planning	25-29	30-34	.59824[*]	.16681	.004
		35-39	.76661[*]	.16681	.000
		40-44	.91176[*]	.16514	.000
		> 45	.86814[*]	.16596	.000
	30-34	25-29	.59824[*]	.16681	.004
		35-39	.16837	.16847	.044
		40-44	.31353	.16681	.031
		> 45	.26990	.16763	.042
	35-39	25-29	.76661[*]	.16681	.000
		30-34	.16837	.16847	.035
		40-44	.14516	.16681	.028
		> 45	.10153	.16763	.034
	40-44	25-29	.91176[*]	.16514	.000
		30-34	.31353	.16681	.031
		35-39	.14516	.16681	.008
		> 45	.04363	.16596	.003
	> 45	25-29	.86814[*]	.16596	.000
		30-34	.26990	.16763	.022
		35-39	.10153	.16763	.034
		40-44	.04363	.16596	.032

The age groups of 40-44 and greater than 45 years of age are highly conscious about positivity as a coping style (Table 4.1) compared to age groups of 35 to 39, 30 to 34, and 25 to 29. There is only a less difference in positivity between the age groups of 35 to 39 and 30 to 34.

Table 4.1 – Post Hoc – Age and Coping Style (Positivity)

Dependent Variable	Age(I)	Age(J)	Mean Difference (I-J)	Std. Error	Sig.
Positivity	25-29	30-34	.34514	.14728	.035
		35-39	.32473	.14728	.011
		40-44	.59804*	.14580	.001
		> 45	.85912*	.14653	.000
	30-34	25-29	.34514	.14728	.035
		35-39	.02041	.14874	.021
		40-44	.25290	.14728	.024
		> 45	.51398*	.14800	.005
	35-39	25-29	.32473	.14728	.018
		30-34	.02041	.14874	.033
		40-44	.27331	.14728	.021
		> 45	.53439*	.14800	.003
	40-44	25-29	.59804*	.14580	.001
		30-34	.25290	.14728	.025
		35-39	.27331	.14728	.034
		> 45	.26108	.14653	.387
	> 45	25-29	.85912*	.14653	.000
		30-34	.51398*	.14800	.005
		35-39	.53439*	.14800	.003
		40-44	.26108	.14653	.387

The age groups of 40 to 44 and >45 are highly conscious about 'Disengagement' as a coping style(Table 4.2) compared to age groups of 35-39, 30-34, and 25-29. There is only a less difference in ''Disengagement'' between the age groups of 35-39 and 30-34.

Table 4.2 Post Hoc Age and Coping Style (Disengagement)

Dependent Variable	Age(I)	Age(J)	Mean Difference (I-J)	Std. Error	Sig.
Disengagement	25-29	30-34	.28291	.16294	.014
		35-39	.20128	.16294	.031
		40-44	.51961*	.16130	.013
		> 45	.45863*	.16210	.040
	30-34	25-29	.28291	.16294	.014
		35-39	.08163	.16456	.008
		40-44	.23669	.16294	.024
		> 45	.17571	.16373	.020
	35-39	25-29	.20128	.16294	.031
		30-34	.08163	.16456	.018
		40-44	.31833	.16294	.022
		> 45	.25735	.16373	.017
	40-44	25-29	.51961*	.16130	.013
		30-34	.23669	.16294	.034
		35-39	.31833	.16294	.022
		> 45	.06098	.16210	.006
	> 45	25-29	.45863*	.16210	.040
		30-34	.17571	.16373	.020
		35-39	.25735	.16373	.017
		40-44	.06098	.16210	.006

Table 4.3 and Figure 2 indicates, Proactive Planning for employees between the age group of 40 to 44 years is highest (Mean =3.5686, SD=.66535) followed by age group of 45 years (Mean=3.5250, SD=.55386), then between 35 and 39 years (Mean = 3.4235, S = .84503), followed by age group of 30 to 34 years (Mean = 3.2551, SD = .83462) and least proactive planning was seen in the age group of 25-29 years with Mean = 2.6569 and SD=1.14451.

Table 4.3 – Descriptive – Age and coping styles (Proactive planning, Positivity and Disengagement)

|		N		Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean Lower Bound	Upper Bound	Minimum	Maximum
Proactive Planning	25-29	5	1	2.6569	1.14451	.16026	2.3350	2.9788	1.00	4.00
	30-34	4	9	3.2551	.83462	.11923	3.0154	3.4948	1.00	4.00
	35-39	4	9	3.4235	.84503	.12072	3.1807	3.6662	1.25	4.00
	40-44	5	1	3.5686	.66535	.09317	3.3815	3.7558	1.25	4.00
	> 4 5	5	0	3.5250	.55386	.07833	3.3676	3.6824	2.00	4.00
	Total	2 5	0	3.2840	.89277	.05646	3.1728	3.3952	1.00	4.00
Positivity	25-29	5	1	2.9559	.88841	.12440	2.7060	3.2058	1.00	4.00
	30-34	4	9	3.3010	.81006	.11572	3.0683	3.5337	1.75	4.00
	35-39	4	9	3.2806	.82543	.11792	3.0435	3.5177	1.75	4.00
	40-44	5	1	3.5539	.58590	.08204	3.3891	3.7187	2.00	4.00
	> 4 5	5	0	3.8150	.49438	.06992	3.6745	3.9555	1.50	4.00
	Total	2 5	0	3.3810	.78585	.04970	3.2831	3.4789	1.00	4.00
Disengagement	25-29	5	1	3.0686	.82625	.11570	2.8362	3.3010	1.00	4.00
	30-34	4	9	2.7857	.80364	.11481	2.5549	3.0165	1.00	4.00
	35-39	4	9	2.8673	.74320	.10617	2.6539	3.0808	1.25	4.00
	40-44	5	1	2.5490	.72460	.10146	2.3452	2.7528	1.00	4.00
	> 4 5	5	0	2.6100	.95453	.13499	2.3387	2.8813	1.00	4.00
	Total	2 5	0	2.7760	.82950	.05246	2.6727	2.8793	1.00	4.00
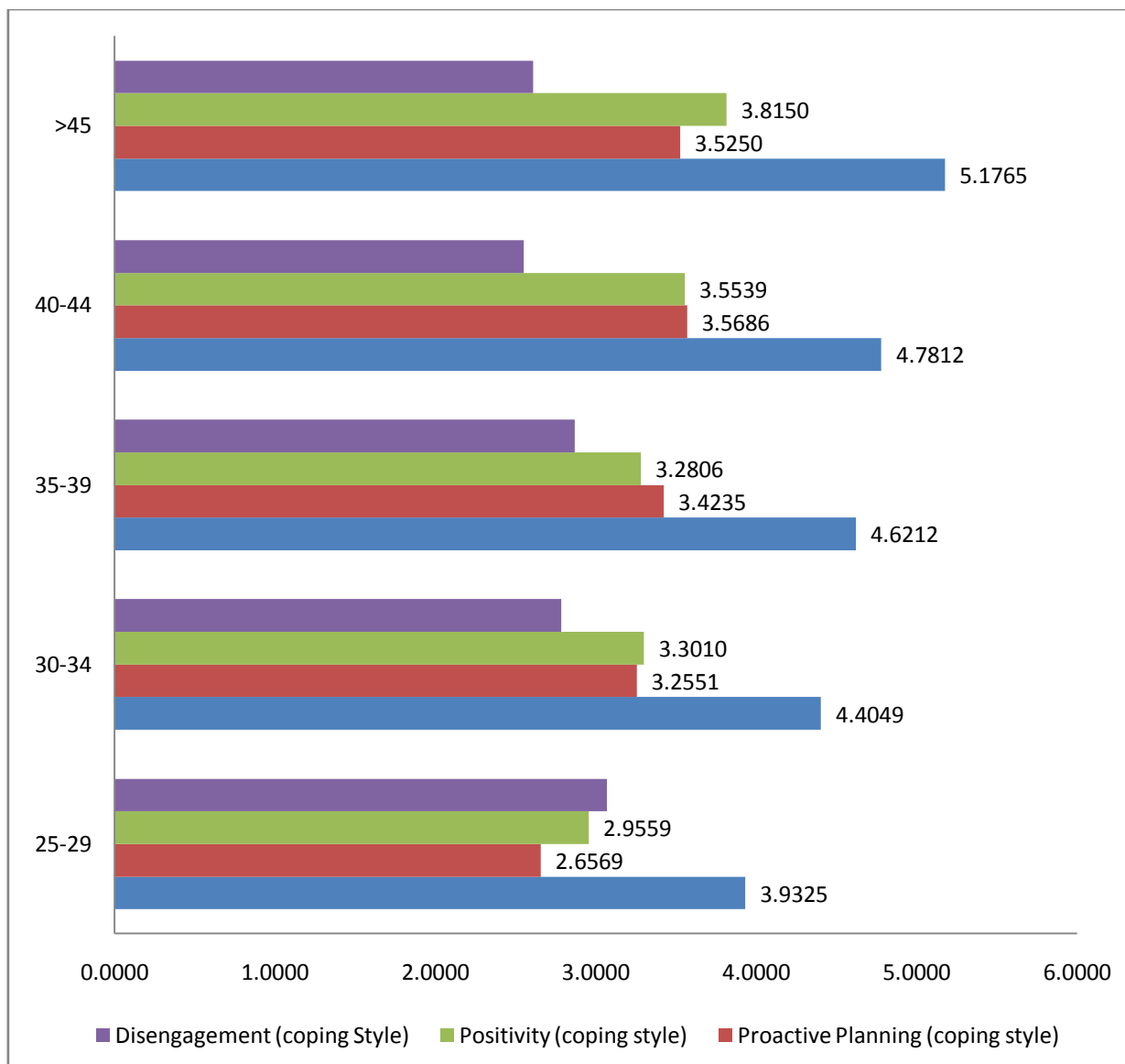
Figure 2; Age groups and Coping Styles

Source: Primary Data and MS Word Charts

Discussion on Results

The main aim of this study was to examine the coping styles adopted by the employees and its effect on the demography (Age) in the information technology sector. The test results showed that there is a statistically significant difference in the coping styles of proactive planning between ages 25-29 years and 35-39 years, also 25-29 years and 40-44 years, then 25-29 years and >45 years. The coping style of proactive planning was statistically significantly different between the age groups of 25-29 years and >45 years, p=.000

Conclusion

The results specify that demography of age influences coping styles of employees towards work stress. As age advances coping styles differ from the experiences gained. Initially the approach for employees would be to openly face things, being risk averse or risk oriented. Later through trial and error and facing the consequences, and learning through the journey they become acclimatized and learn the trick of the trade. Hence age is a positive factor to coping style. In organizations, senior employees can train junior employees how to develop these beneficial coping styles to adequately be equipped for the work stress so that it does not affect the physical and mental health and can contribute more positively to the organizations as healthy employees.

Reference

Bhattacharya, S., &Basu, J. (2007). Distress, wellness and organizational role stress among IT professionals: Role of life events and coping resources. *Journal of Applied Psychology, 61(4), 468-472.*

Brook, A. (1973). Mental Stress at Work.*The Practitioner, 210, pp. 500-506.*

Caldwell, D.F., Chatman, J.A., & O'Reilly, C. A. (1990).Building organizational commitment: A multiform study.*Journal of occupational Psychology, 63(3), 245-261*

Caplan, R.D. (1987). Person-environment fit theory and organizations: Commensurate dimensions, time perspectives, and mechanisms. *Journal of Vocational Behavior,* 31(3), 248-267.

Cobb S. (1976). Social support as a moderator of life stress.*Psychomatic Medicine, 38, 300-314.*

Cox, J.H. (1999).*Work-related stress:Nature and management.*   Retrieved from oshwiki.eu:https://oshwiki.eu/wike/Work-related_stress:_Nature_and_managment

CWA.(2009).www.cwa-union.org. Retrieved from www.cwa-union.org.,, http://www.cwa-union.org/national-issues/health-and-safety/health-and-safety-fact-sheets/occupational-stress-and-workplacee.

Cohen, S. (2004). Social Relationships and Health.*American Psychologist,* 59(8), 676-684.doi:10.1037/0003-066X.59.8.676

Carter, A. L. (2000). *The role of resilience in the adjustment of adult children of alcholoics (Doctoral dissertation).*Retrieved from ProQuest dissertations and thesis database. (UMI number. 9989954)

Camus, A. (1942). *The Stranger.*Toronto, Canada: Alfred A. Knopf, Inc.

Campbell, S., Cohan, S. L., & Stein, M. (2006).Relationship of resilience to personality, coping and psychiatric symptoms in young adults.*Behavioral Research and Therapy,* 44(4), 585-595. Doi:10.1016/j.brat.2005.05.001

DeCotiis, T.a. (1987). Path Analysis of a Model of the Antecedents and Consequences of Organizational Commitment.Human Relations. http//dx.doi.org/10.1177/00187268704000704, 445.

Dhingra, R. (2005). At the Cross Roads: Families in Distress. www.krepublishers.com.

Dogen. (1667). *Dogen: Textual and Historical Studies.* China.

Dunkel-Schetter, C., Folkman, S., & Lazarus, R.S. (1987).Correlates of social support receipt.*Jounal of Personality and Social Psychology,* 53(1), 71-80. Doi:10.1037/0022-3514.53.1.71

Editor.   (2014).   http://www.employmentcrossing.com.   Retrieved   from http://www.employmentcrossing.com/employers/article/900006766/   The-Three-Types-of-Organizational-Commitment-of-Employees

Emmons, R. A. (1999). The psychology of ultimate concerns: *Motivation and spirituality in personality,* New York: SAGE Publications

Forsyth, P. (1921). *The Soul of Prayer,* USA: Regent College Publishing.

Fergus, S., & Zimmerman, M.A. (2005). Adolescent Resilience: A Framework for Understanding Healthy Development in the face Risk. *Annual Review of Public Health,* 26, 399-419. Doi:10.1146/annurev.publhealth.

Feldman, C. (2005). In *Compassion: Listening to the Cries of the World.* Berkeley, CA: Rodmell Press.

Fayombo, G. (2010). The relationship between personality traits and psychological resilience among the carribean adolescents.*International Journal of Psychological Studies, 2(2), 105-116.*

Gadzella, B. M., Ginther, D.W., Tomcala, M., & Bryant, G.W. (1990). Stress as perceived by professional. *Psychological Reports,* 67(3), 979-983.

Gavin, J.F., & Axelrod, W.L. (1977).Managerial stress and strain in a mining organization.*Journal of Vocational Behavior,* 11(1), 66-74.

Gbadamosi, G. (2003). HRM and the commitment rhetoric: challenges for Africa. *Management Decision,* 41(3), 274-280.

Goleman, D. (1995). *Emotional Intelligence.* New York, NY: Bantam Books

Greene, R. W., Abidin, R. R., &Kmetz, C. (1997). The index of teaching stress: A measure of student-teacher compatibility. *Journal of Psychology, 35(3), 239-259.*

Hinrichs,J., DeFife, J., &Westen, D. (2011) Personality Subtypes in Adolescent and adult children of alcoholics: A two part study. *The Journal of Nervous and Mental Diseases, 199(7), 487-498. Doi:10.1097/NMD.0b013e3182214268*

Iqbal, A.K.-O. (2011). The impact of assessment of demographic factors on faculty commitment in the Kingdom of Saudi Arabian Universities. *Journal of College Teaching & Learning,* 8(2), 1-10.

Jandejonge, A. (1990). Factorial invariance and stability of the Effort-Reward Imbalance Scales: A longitudinal analysis of two samples with different time lags. *International Journal of Behavioral Medicine.*15(1), 62-72.

Jaros, S. (2009). *Meyer and Allen Model of Organizational Commitment: Measurement Issues.* New Delhi: ICFAI University Press.

Jermier, J.M., &Berkes, L.J. (1979). Leader behavior in a police command bureaucracy: A closer look at the quasi-military model. Administrative Science Quarterly, 14(1), 1-23.

Joarder, M.H. (2012). The intervening effects of a affective commitment on HRM. Retrieved 25 January, 2016, from http://www.journal.au.edu.