ISSN 2348-1218 (print)
International Journal of Interdisciplinary Research and Innovations ISSN 2348-1226 (online)
Vol. 4, Issue 1, pp: (113-126), Month: January - March 2016, Available at: www.researchpublish.com

Exploring the Underlying Dimensions of Organizational Commitment through Factor Analysis in Medical Practitioners at Lucknow: A Pilot Study

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Abstract: **Purpose – The purpose of this paper is to explore the underlying dimensions of Organizational Commitment.**

Design/methodology/approach – Medical Practitioners (N = 119) working in hospitals completed this pilot survey on dimensions of their commitment to the hospitals and medical profession and the significance they place on certain organizational characteristics for their existing level of commitment. Principal component analyses of their personal and organizational characteristics were used.

Findings – Organizational Commitment was dependent on the employees fit to organization, human resource practices, supportive climate and ethics followed in organization. The commitment of medical practitioners is also dependent on opportunities for professional development programs in hospitals.

Research limitations/implications – Further extensive study is needed to be conducted in other Indian cities.

Practical implications – Knowledge of the dimensions that underlie organizational commitment in medical practitioners will help hospitals to introduce it, which will improve working of doctors and lead to better patient treatment and care.

Originality/value – Interpretation and results presented in this paper exhibits the pertinence of improving organizational commitment in the process of reducing turnover of medical practitioners and increasing their attachment to their workplace.

Keywords: **Organizational Commitment, Employee-Environment congruency, Transactional Psychological Contract, Perceived crisis support, Perceived Organization Ethics, Learning Environment, Work Stress and Optimism.**

1. INTRODUCTION

Factor analysis is an umbrella term for certain distinct procedures chiefly applied to summarize and reduce the data. It is used in the pilot survey. Basically two methods are popular. The principal component analysis (PCA) takes into consideration the total variance in the data for estimating components and principal axis factoring (PAF) only takes into account the common variance in extracting factors. We will be using the PCA as need to extract minimum factors that will explain maximum variance and further can also use in multivariate analysis. The explanatory or independent variables used in the study are factors influencing as causal and mediators to determine level of organizational commitment in registered medical practitioners working at hospitals in Lucknow. This study was conducted by collection of data from 119 respondents working in hospitals.

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The objective of conducting factor analysis here is

1. To identify the underlying dimensions that explain the correlations among a set of variables identified during the literature review, influencing the organizational commitment.

2. The other objective is to identify a smaller set of uncorrelated variables for subsequent multivariate analysis, where these factors may be used as independent variables to explain differences in high, medium or low level of the respondents' commitment.

2. METHODOLOGY

28 independent variables impacting organizational commitment were drawn from rigorous literature review and then were used for factor analysis. Pilot survey was conducted by collection of primary data through administration of questionnaire to 119 respondents. Respondents were registered medical practitioners who were working at hospitals located in Lucknow. The questionnaire was handed over to hospital administration to get it filled from medical doctors. It covered teaching hospitals, general hospitals, specialized hospitals and corporate hospitals. It covered both allopathic and AYUSH hospitals in private and government sector. No monetary incentive was offered to the doctors or hospitals for the same but they were assured complete anonymity of their responses and identity. The chosen sample size is appropriate as is approximately four times the number of observations according to a rough guideline. Analysis was done through SPSS software [version 21].

The suitability of the analyses is based on correlation of factors.

3. ANALYSIS

First we examined the descriptive statistics of variables. Highest mean is of General mood (*M*= 4.269, *SD*=.63027) and Perception of organization change (*M*= 4.269 *SD*=.75281). Highest standard deviation is of ethical practices in the organization that affects commitment of doctors (*SD*=1.31398).

Table I:

Descriptive Statistics			
Independent Variables	Mean	Std. Deviation	Analysis N
General mood	4.2269	.63027	119
Central Life Interest	4.0420	.65607	119
Goal identity	3.6555	.95169	119
Demand-ability fit	3.7731	.82787	119
Needs-supplies fit	3.4202	1.07747	119
Work Autonomy	3.6387	.98058	119
Colleague Relations	3.9748	.54403	119
Leader member Relations	4.2185	.63991	119
Satisfaction with practices	3.3277	1.21508	119
Passion: Feel valued	3.7731	.79657	119
Relationship Social Capital	3.0336	1.21385	119
Colleague Crisis Support	4.1513	.59145	119
Altruism	3.9580	.93333	119
Quick Information sharing	4.1008	.69374	119
Knowledge shared with oneness	3.9832	.91117	119
Perception of organization change	4.2269	.75281	119
Relational psychological contract	3.8992	.74099	119
Psychological contract breach	3.9748	.75310	119
Professional development	3.4958	1.26138	119
Perception of organization politics	2.7563	1.22105	119
Ethical Organization	2.4874	1.31398	119
Stress	2.2605	1.05334	119
Job mobility	2.2521	1.08314	119
Work life balance	2.1681	1.08393	119
Turnover intention	2.0840	.95296	119
Transactional Psychological contract	2.5210	1.01555	119
Favouritism	2.2101	1.17800	119
Psychological Capital	1.4622	.84161	119

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3.1. Appropriateness of technique of factor analysis:

In the next step correlation matrix was generated between variables for further analysis. The suitability of the analyses was based on correlation of factors.

Table II: Correlation Matrix

Correlation Matrix											
		General mood	Central life interest	Goal identity	Demand-ability fit	Needs-supplies fit	Work Autonomy	Colleague Relations	Leader member relations	Satisfaction with practices	Passion: Feel valued
Correlation	General mood	1.000	.182	.188	.246	.333	.353	.338	.338	.123	.272
	Central life interest	.182	1.000	.159	.361	.131	-.029	.050	.442	.206	.359
	Goal identity	.188	.159	1.000	.513	.605	.547	.490	.111	.670	.488
	Demand-ability fit	.246	.361	.513	1.000	.640	.577	.326	.286	.715	.731
	Needs-supplies fit	.333	.131	.605	.640	1.000	.706	.582	-.036	.794	.645
	Work Autonomy	.353	-.029	.547	.577	.706	1.000	.539	.032	.691	.556
	Colleague Relations	.338	.050	.490	.326	.582	.539	1.000	.308	.397	.397
	Leader member relations	.338	.442	.111	.286	-.036	.032	.308	1.000	.016	.248
	Satisfaction with practices	.123	.206	.670	.715	.794	.691	.397	.016	1.000	.787
	Passion: Feel valued	.272	.359	.488	.731	.645	.556	.397	.248	.787	1.000
	Relationship Social Capital	.045	.051	.414	.117	.462	.338	.296	-.250	.372	.131
	Colleague Crisis support	-.070	.202	-.163	.053	-.154	-.124	.038	.315	-.152	.073
	Altruism	.247	.377	-.007	.371	.203	.048	.065	.157	.244	.432
	Quick Information sharing	.083	.233	-.281	-.063	-.250	-.233	.029	.313	-.281	-.050
	Knowledge shared with oneness	.302	.554	.326	.557	.422	.268	.136	.181	.487	.508
	Perception of organization change	.123	.186	-.020	.192	-.004	.066	.159	.459	-.008	.214
	Relational psychological contract	.213	.253	.587	.474	.542	.416	.435	.100	.574	.550
	Psychological contract breach	.030	-.238	.532	-.050	.180	.252	.412	.047	.157	.019
	Professional development	.241	.313	.638	.612	.737	.406	.315	.064	.789	.712
	Perception of organization politics	-.038	.330	-.015	.389	-.147	-.025	-.213	.221	.106	.361
	Ethical Organization	.070	.359	.569	.554	.291	.388	.171	.134	.478	.503
	Stress	-.256	.021	-.485	-.408	-.463	-.327	-.343	-.261	-.365	-.373
	Job mobility	-.047	.176	.471	.395	.308	.270	.112	-.007	.433	.362
	Work life balance	-.255	.014	-.330	-.146	-.242	-.309	-.237	-.041	-.209	-.083
	Turnover intention	-.215	.211	.219	.186	.155	.105	-.110	-.239	.320	.204
	Transactional Psychological contract	.065	.310	-.111	.293	.162	-.031	-.252	-.059	.149	.263
	Favouritism	-.247	.186	-.396	-.038	-.310	-.345	-.481	-.118	-.114	.015
	Psychological Capital	-.407	.057	.021	-.079	.046	-.094	-.270	-.425	.199	.019
Sig. (1-tailed)	General mood		.024	.020	.004	.000	.000	.000	.000	.091	.001
	Central life interest	.024		.042	.000	.078	.378	.293	.000	.012	.000
	Goal identity	.020	.042		.000	.000	.000	.000	.115	.000	.000
	Demand-ability fit	.004	.000	.000		.000	.000	.000	.001	.000	.000
	Needs-supplies fit	.000	.078	.000	.000		.000	.000	.349	.000	.000
	Work Autonomy	.000	.378	.000	.000	.000		.000	.363	.000	.000
	Colleague Relations	.000	.293	.000	.000	.000	.000		.000	.000	.000
	Leader member relations	.000	.000	.115	.001	.349	.363	.000		.431	.003
	Satisfaction with practices	.091	.012	.000	.000	.000	.000	.000	.431		.000
	Passion: Feel valued	.001	.000	.000	.000	.000	.000	.000	.003	.000	
	Relationship Social Capital	.312	.289	.000	.102	.000	.000	.001	.003	.000	.078
	Colleague Crisis support	.224	.014	.039	.282	.047	.089	.340	.000	.049	.214
	Altruism	.003	.000	.470	.000	.013	.302	.242	.044	.004	.000
	Quick Information sharing	.185	.005	.001	.248	.003	.005	.376	.000	.001	.294
	Knowledge shared with oneness	.000	.000	.000	.000	.000	.002	.070	.025	.000	.000
	Perception of organization change	.092	.021	.414	.018	.485	.238	.042	.000	.466	.010
	Relational psychological contract	.010	.003	.000	.000	.000	.000	.000	.138	.000	.000
	Psychological contract breach	.373	.005	.000	.294	.025	.003	.000	.307	.044	.420
	Professional development	.004	.000	.000	.000	.000	.000	.000	.244	.000	.000
	Perception of organization politics	.342	.000	.438	.000	.055	.395	.010	.008	.126	.000
	Ethical Organization	.225	.000	.000	.000	.001	.000	.031	.073	.000	.000
	Stress	.002	.411	.000	.000	.000	.000	.000	.002	.000	.000
	Job mobility	.305	.028	.000	.000	.000	.001	.114	.471	.000	.000
	Work life balance	.003	.441	.000	.057	.004	.000	.005	.328	.011	.185
	Turnover intention	.009	.011	.008	.022	.046	.127	.116	.004	.000	.013
	Transactional Psychological contract	.240	.000	.115	.001	.039	.371	.003	.261	.053	.002
	Favouritism	.003	.021	.000	.342	.000	.000	.000	.101	.109	.435
	Psychological Capital	.000	.270	.412	.196	.311	.155	.001	.000	.015	.420

ISSN 2348-1218 (print)
International Journal of Interdisciplinary Research and Innovations ISSN 2348-1226 (online)
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Table II: Correlation Matrix (continued)

Correlation Matrix											
		Relationship Social Capital	Colleague Crisis support	Altruism	Quick Information sharing	Knowledge shared with oneness	Perception of organization change	Relational psychological contract	Psychological contract breach	Professional development	Perception of organization politics
Correlation	General mood	.045	-.070	.247	.083	.302	.123	.213	.030	.241	-.038
	Central life interest	.051	.202	.377	.233	.554	.186	.253	-.238	.313	.330
	Goal identity	.414	-.163	-.007	-.281	.326	-.020	.587	.532	.638	-.015
	Demand-ability fit	.117	.053	.371	-.063	.557	.192	.474	-.050	.612	.389
	Needs-supplies fit	.462	-.154	.203	-.250	.422	-.004	.542	.180	.737	-.147
	Work Autonomy	.338	-.124	.048	-.233	.268	.066	.416	.252	.406	-.025
	Colleague Relations	.296	.038	.065	.029	.136	.159	.435	.412	.315	-.213
	Leader member relations	-.250	.315	.157	.313	.181	.459	.100	.047	.064	.221
	Satisfaction with practices	.372	-.152	.244	-.281	.487	-.008	.574	.157	.789	.106
	Passion: Feel valued	.131	.073	.432	-.050	.508	.214	.550	.019	.712	.361
	Relationship Social Capital	1.000	-.349	.016	-.306	.054	-.435	.315	.223	.338	-.292
	Colleague Crisis support	-.349	1.000	.242	.252	.083	.512	-.178	-.106	-.113	.157
	Altruism	.016	.242	1.000	.321	.617	.207	.165	-.436	.320	.303
	Quick Information sharing	-.306	.252	.321	1.000	.257	.329	.003	-.222	-.213	.199
	Knowledge shared with oneness	.054	.083	.617	.257	1.000	.179	.474	-.248	.531	.309
	Perception of organization change	-.435	.512	.207	.329	.179	1.000	.057	-.035	-.030	.042
	Relational psychological contract	.315	-.178	.165	.003	.474	.057	1.000	.360	.634	.057
	Psychological contract breach	.223	-.106	-.436	-.222	-.248	-.035	.360	1.000	.201	-.228
	Professional development	.338	-.113	.320	-.213	.531	-.030	.634	.201	1.000	.046
	Perception of organization politics	-.292	.157	.303	.199	.309	.042	.057	-.228	.046	1.000
	Ethical Organization	.138	-.139	-.073	-.082	.325	-.087	.477	.141	.385	.534
	Stress	.073	.018	-.092	-.059	-.331	-.300	-.444	-.291	-.493	.070
	Job mobility	.039	-.020	-.115	-.091	.305	-.008	.349	.133	.478	.220
	Work life balance	-.017	-.014	.024	.022	-.134	-.234	-.232	-.296	-.210	.275
	Turnover intention	.239	-.399	-.091	-.192	.187	-.393	.252	-.210	.339	.142
	Transactional Psychological contract	-.014	-.019	.309	-.147	.266	-.089	-.144	-.437	.187	.459
	Favouritism	-.189	.149	.363	.171	.161	-.073	-.286	-.500	-.168	.407
	Psychological Capital	.292	-.244	-.180	-.313	-.012	-.448	-.033	-.088	.158	.111
Sig. (1-tailed)	General mood	.312	.224	.003	.185	.000	.092	.010	.373	.004	.342
	Central life interest	.289	.014	.000	.005	.000	.021	.003	.005	.000	.000
	Goal identity	.000	.039	.470	.001	.000	.414	.000	.000	.000	.438
	Demand-ability fit	.102	.282	.000	.248	.000	.018	.000	.294	.000	.000
	Needs-supplies fit	.000	.047	.013	.003	.000	.485	.000	.025	.000	.055
	Work Autonomy	.000	.089	.302	.005	.002	.238	.000	.003	.000	.395
	Colleague Relations	.001	.340	.242	.376	.070	.042	.000	.000	.000	.010
	Leader member relations	.003	.000	.044	.000	.025	.000	.138	.307	.244	.008
	Satisfaction with practices	.000	.049	.004	.001	.000	.466	.000	.044	.000	.126
	Passion: Feel valued	.078	.214	.000	.294	.000	.010	.000	.420	.000	.000
	Relationship Social Capital		.000	.431	.000	.279	.000	.000	.007	.000	.001
	Colleague Crisis support	.000		.004	.003	.184	.000	.027	.127	.111	.044
	Altruism	.431	.004		.000	.000	.012	.036	.000	.000	.000
	Quick Information sharing	.000	.003	.000		.002	.000	.485	.008	.010	.015
	Knowledge shared with oneness	.279	.184	.000	.002		.026	.000	.003	.000	.000
	Perception of organization change	.000	.000	.012	.000	.026		.271	.354	.372	.324
	Relational psychological contract	.000	.027	.036	.485	.000	.271		.000	.000	.269
	Psychological contract breach	.007	.127	.000	.008	.003	.354	.000		.014	.006
	Professional development	.000	.111	.000	.010	.000	.372	.000	.014		.309
	Perception of organization politics	.001	.044	.000	.015	.000	.324	.269	.006	.309	
	Ethical Organization	.067	.065	.215	.187	.000	.173	.000	.063	.000	.000
	Stress	.216	.424	.159	.260	.000	.000	.000	.001	.000	.226
	Job mobility	.338	.413	.106	.164	.000	.464	.000	.075	.000	.008
	Work life balance	.426	.442	.399	.405	.073	.005	.006	.001	.011	.001
	Turnover intention	.004	.000	.162	.018	.021	.000	.003	.011	.000	.062
	Transactional Psychological contract	.439	.417	.000	.055	.002	.167	.060	.000	.021	.000
	Favouritism	.020	.053	.000	.032	.040	.214	.001	.000	.034	.000
	Psychological Capital	.001	.004	.025	.000	.449	.000	.359	.169	.044	.116

ISSN 2348-1218 (print)
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Table II: Correlation Matrix (continued)

Correlation Matrix									
		Ethical Organization	Stress	Job mobility	Work life balance	Turnover intention	Transactional Psychological contract	Favouritism	Psychological Capital
Correlation	General mood	.070	-.256	-.047	-.255	-.215	.065	-.247	-.407
	Central life interest	.359	.021	.176	.014	.211	.310	.186	.057
	Goal identity	.569	-.485	.471	-.330	.219	-.111	-.396	.021
	Demand-ability fit	.554	-.408	.395	-.146	.186	.293	-.038	-.079
	Needs-supplies fit	.291	-.463	.308	-.242	.155	.162	-.310	.046
	Work Autonomy	.388	-.327	.270	-.309	.105	-.031	-.345	-.094
	Colleague Relations	.171	-.343	.112	-.237	-.110	-.252	-.481	-.270
	Leader member relations	.134	-.261	-.007	-.041	-.239	-.059	-.118	-.425
	Satisfaction with practices	.478	-.365	.433	-.209	.320	.149	-.114	.199
	Passion: Feel valued	.503	-.373	.362	-.083	.204	.263	.015	.019
	Relationship Social Capital	.138	.073	.039	-.017	.239	-.014	-.189	.292
	Colleague Crisis support	-.139	.018	-.020	-.014	-.399	-.019	.149	-.244
	Altruism	-.073	-.092	-.115	.024	-.091	.309	.363	-.180
	Quick Information sharing	-.082	-.059	-.091	.022	-.192	-.147	.171	-.313
	Knowledge shared with oneness	.325	-.331	.305	-.134	.187	.266	.161	-.012
	Perception of organization change	-.087	-.300	-.008	-.234	-.393	-.089	-.073	-.448
	Relational psychological contract	.477	-.444	.349	-.232	.252	-.144	-.286	-.033
	Psychological contract breach	.141	-.291	.133	-.296	-.210	-.437	-.500	-.088
	Professional development	.385	-.493	.478	-.210	.339	.187	-.168	.158
	Perception of organization politics	.534	.070	.220	.275	.142	.459	.407	.111
	Ethical Organization	1.000	-.123	.657	.037	.522	.272	-.017	.201
	Stress	-.123	1.000	-.377	.555	.155	.229	.461	.437
	Job mobility	.657	-.377	1.000	-.072	.480	.142	-.029	.206
	Work life balance	.037	.555	-.072	1.000	.273	.297	.457	.472
	Turnover intention	.522	.155	.480	.273	1.000	.270	.165	.606
	Transactional Psychological contract	.272	.229	.142	.297	.270	1.000	.538	.341
	Favouritism	-.017	.461	-.029	.457	.165	.538	1.000	.354
	Psychological Capital	.201	.437	.206	.472	.606	.341	.354	1.000
Sig. (1-tailed)	General mood	.225	.002	.305	.003	.009	.240	.003	.000
	Central life interest	.000	.411	.028	.441	.011	.000	.021	.270
	Goal identity	.000	.000	.000	.000	.008	.115	.000	.412
	Demand-ability fit	.000	.000	.000	.057	.022	.001	.342	.196
	Needs-supplies fit	.001	.000	.000	.004	.046	.039	.000	.311
	Work Autonomy	.000	.000	.001	.000	.127	.371	.000	.155
	Colleague Relations	.031	.000	.114	.005	.116	.003	.000	.001
	Leader member relations	.073	.002	.471	.328	.004	.261	.101	.000
	Satisfaction with practices	.000	.000	.000	.011	.000	.053	.109	.015
	Passion: Feel valued	.000	.000	.000	.185	.013	.002	.435	.420
	Relationship Social Capital	.067	.216	.338	.426	.004	.439	.020	.001
	Colleague Crisis support	.065	.424	.413	.442	.000	.417	.053	.004
	Altruism	.215	.159	.106	.399	.162	.000	.000	.025
	Quick Information sharing	.187	.260	.164	.405	.018	.055	.032	.000
	Knowledge shared with oneness	.000	.000	.000	.073	.021	.002	.040	.449
	Perception of organization change	.173	.000	.464	.005	.000	.167	.214	.000
	Relational psychological contract	.000	.000	.000	.006	.003	.060	.001	.359
	Psychological contract breach	.063	.001	.075	.001	.011	.000	.000	.169
	Professional development	.000	.000	.000	.011	.000	.021	.034	.044
	Perception of organization politics	.000	.226	.008	.001	.062	.000	.000	.116
	Ethical Organization		.091	.000	.344	.000	.001	.425	.014
	Stress	.091		.000	.000	.046	.006	.000	.000
	Job mobility	.000	.000		.217	.000	.062	.379	.012
	Work life balance	.344	.000	.217		.001	.001	.000	.000
	Turnover intention	.000	.046	.000	.001		.002	.036	.000
	Transactional Psychological contract	.001	.006	.062	.001	.002		.000	.000
	Favouritism	.425	.000	.379	.000	.036	.000		.000
	Psychological Capital	.014	.000	.012	.000	.000	.000	.000	

Next we Kaiser Meyer Olkin measure was examined to test the sample adequacy for which a value greater than 0.5 was desirable (Gaur, A. S. & Gaur, S.S., 2012). Next Barlett's test of sphericity was checked. The null hypothesis was that all diagonal terms are 1 and off diagonal 0 in the correlation matrix, that suggested population correlation was an identity matrix. Large value of this measure was desirable for factor analysis.

Table III: Kaiser Meyer Olkin measure and Barlett's test

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.723
Bartlett's Test of Sphericity	Approx. Chi-Square	2705.694
	df	378
	Sig.	.000

KMO for this survey was .723 that indicated the adequacy of sample size. Barlett test also showed large value i.e. 2705.694, that pointed existence of correlations among the variables included for the study. Both together corroborated the suitability of factor analysis.

3.2. Factor analysis:

Communality gives the variance accounted for a particular variable by all the common variables (Gaur, A. S. & Gaur, S.S., 2012). i.e. 28 which was shown in third column of the Table IV. In the table below the values mentioned under extraction were important because then not all variables but few factors explained the variance in each variable. Therefore the amount of variance fell. It was seen that all were above .60 that was acceptable or if factors were accounting for very low variance in a particular variable then it needed to be dropped.

Table IV: Communalities

Communalities		
	Initial	Extraction
General mood	1.000	.770
Central life interest	1.000	.668
Goal identity	1.000	.774
Demand-ability fit	1.000	.795
Needs-supplies fit	1.000	.871
Work Autonomy	1.000	.722
Colleague Relations	1.000	.737
Leader member relations	1.000	.734
Satisfaction with practices	1.000	.878
Passion: Feel valued	1.000	.810
Relationship Social Capital	1.000	.754
Colleague Crisis support	1.000	.753
Altruism	1.000	.817
Quick Information sharing	1.000	.655
Knowledge shared with oneness	1.000	.805
Perception of organization change	1.000	.692
Relational psychological contract	1.000	.714
Psychological contract breach	1.000	.710
Professional development	1.000	.800
Perception of organization politics	1.000	.728
Ethical Organization	1.000	.891
Stress	1.000	.816
Job mobility	1.000	.730
Work life balance	1.000	.652
Turnover intention	1.000	.751
Transactional Psychological contract	1.000	.738
Favouritism	1.000	.729
Psychological Capital	1.000	.806

Extraction Method: Principal Component Analysis.

ISSN 2348-1218 (print)
International Journal of Interdisciplinary Research and Innovations ISSN 2348-1226 (online)
Vol. 4, Issue 1, pp: (113-126), Month: January - March 2016, Available at: www.researchpublish.com

4. DETERMINING THE NUMBER OF FACTORS

4.1 Based on Eigenvalue:

As 28 variables were included that influenced organizational commitment of respondents, to gain parsimony, only factors that possessed Eigenvalue greater than 1 were retained. This method is feasible as number of variables exceed 20. Eigenvalue for a factor indicates the total variance attributed to that factor.

4.2 Based on Scree Plot:

It is the graphical representation of Eigenvalues of all the factors initially considered and is used for identifying the number of useful factors. Scree plot is examined for the sudden break in sizes of eigenvalues (Gaur, A. S. & Gaur, S.S., 2012). i.e. after 7th factor when graph moved to form flat line. This indicated that there are 7 factors that accounted for maximum variance of all variables initially included.

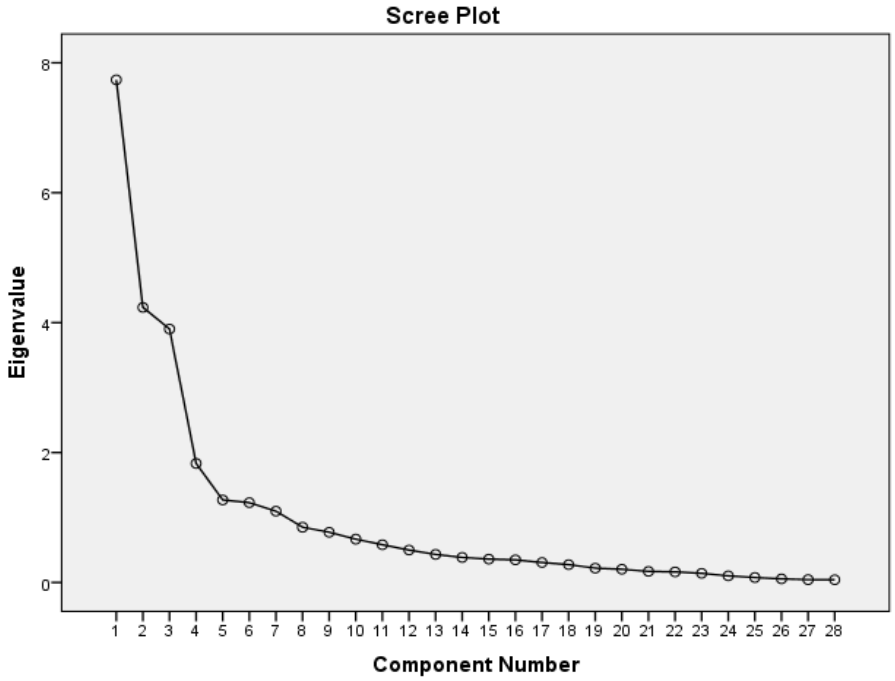

Figure I: Scree Plot

4.3 Based on percentage of variance:

The total variance accounted by all 28 factors as seen in the Table V was 28, which corresponded to number of variables. It was seen that factor 1 accounted for variance of 7.738, which is (7.738 / 28) or 27.635% of total variance. This meant that this factor accounted for 27.635% of total influence in the determination of the level of organizational commitment in registered medical practitioners. In general all the factors extracted should explain at least 60% of variance. From the table it can be found that they are explaining 76.08 %.

Table V: Total variance explained: Initial Eigenvalues, Extraction sum of squared loadings and Rotation sum of squared loadings

Total Variance Explained						
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	7.738	27.635	27.635	7.738	27.635	27.635
2	4.234	15.123	42.758	4.234	15.123	42.758
3	3.902	13.934	56.692	3.902	13.934	56.692
4	1.832	6.544	63.236	1.832	6.544	63.236
5	1.271	4.538	67.774	1.271	4.538	67.774
6	1.229	4.388	72.162	1.229	4.388	72.162

7	1.097	3.918	76.080	1.097	3.918	76.080
8	.851	3.039	79.119			
9	.773	2.762	81.881			
10	.667	2.381	84.262			
11	.581	2.074	86.336			
12	.499	1.783	88.118			
13	.432	1.542	89.660			
14	.385	1.377	91.036			
15	.360	1.285	92.321			
16	.349	1.247	93.568			
17	.307	1.096	94.664			
18	.275	.981	95.645			
19	.221	.789	96.434			
20	.204	.730	97.164			
21	.170	.608	97.772			
22	.163	.584	98.355			
23	.141	.503	98.859			
24	.102	.364	99.222			
25	.076	.272	99.494			
26	.056	.199	99.693			
27	.044	.156	99.849			
28	.042	.151	100.000			

Total Variance Explained

Component	Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %
1	6.597	23.561	23.561
2	3.210	11.464	35.025
3	2.731	9.752	44.777
4	2.602	9.292	54.069
5	2.203	7.867	61.936
6	2.083	7.439	69.375
7	1.878	6.705	76.080
8			
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Extraction Method: Principal Component Analysis.

The last part in the Table V gives the information for extracted factors after rotation. Here relative value of eigenvalues has changed but cumulative percentage of variance remains the same only variance is redistributed. It can be clearly observed that variance is given in descending order making the first factor very significant in explaining the criterion variable.

4.4 Based on Factor matrix:

It contained the coefficients used to express the standardized variables into factors. These are factor loadings that show correlation between factor and the variable. Coefficient with large absolute value indicated that factors and variables are closely related. Although the unrotated factor matrix gives the loading (we have used loading above 0.4) but factors cannot be interpreted on the basis of it as variables are correlated to other factors as well.

Table VI: Factor Matrix

Component Matrix[a]							
	Component						
	1	2	3	4	5	6	7
Satisfaction with practices	.872						
Professional development	.840						
Needs-supplies fit	.833						
Passion: Feel valued	.813						
Demand-ability fit	.798						
Goal identity	.796						
Relational psychological contract	.745						
Work Autonomy	.716						
Ethical Organization	.615			.532			
Knowledge shared with oneness	.605						
Stress	-.570	.430					
Colleague Relations	.562	-.458					
Job mobility	.538			.537			
Favouritism		.769					
Transactional Psychological contract		.732					
Perception of organization politics		.635					
Psychological contract breach		-.620					
Work life balance		.568					
Turnover intention		.535	-.526				
Central life interest		.445			.432		
Perception of organization change			.713				
Leader member relations			.643				
Psychological Capital		.563	-.642				
Quick Information sharing			.620				
Colleague Crisis support			.607				.497
Relationship Social Capital			-.545	-.402			
Altruism			.542	-.514			
General mood							-.538
Extraction Method: Principal Component Analysis.[a]							
a. 7 components extracted.							

Therefore we further examined rotated factor matrix, using orthogonal varimax rotation which is used when factors are uncorrelated. Through rotation the significant loading is shown preferably on one or maximum two factors. This makes the interpretation simple.

Table VII presented the table titled rotated Factor matrix. For a good factor solution, a particular variable should load high on one factor and low on all other factors in this matrix. In line with all past researchers, we used a cut off of 0.40 to identify high loadings.

ISSN 2348-1218 (print)
International Journal of Interdisciplinary Research and Innovations ISSN 2348-1226 (online)
Vol. 4, Issue 1, pp: (113-126), Month: January - March 2016, Available at: www.researchpublish.com

Table VII: Rotated Factor Matrix

Rotated Component Matrix[a]							
	Component						
	1	2	3	4	5	6	7
Satisfaction with practices	.913						
Needs-supplies fit	.904						
Professional development	.814						
Passion: Feel valued	.808						
Demand-ability fit	.745						
Work Autonomy	.732						
Goal identity	.678	-.438					
Relational psychological contract	.588						
Colleague Relations	.539	-.538					
Psychological contract breach		-.788					
Transactional Psychological contract		.732					
Favouritism		.691					
Altruism		.539			.522		
Colleague Crisis support			.835				
Perception of organization change			.771				
Turnover intention			-.568	.450			
Relationship Social Capital	.473		-.524				
Leader member relations			.497				.485
Ethical Organization				.830			
Job mobility				.659			
Perception of organization politics		.434		.657			
Central life interest					.677		
Quick Information sharing					.673		
Knowledge shared with oneness	.508				.608		
Stress						.750	
Work life balance						.711	
General mood							.803
Psychological Capital			-.418			.488	-.561
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.[a]							
a. Rotation converged in 10 iterations.							

5. INTERPRETATION AND ANALYSIS OF FACTORS AND RELIABILITY OF SCALE

Next the variables were identified which had large loadings on each factor. These variables under the factor were used to give suitable name to the factor. For e.g. all 10 variables that loaded high on first factor were clubbed and termed as Employee-Environment congruency. The seven factors that were extracted had been given name as follows:

Table VIII: Extracted factors

Factor extracted	Factor Name	Factor extracted	Factor Name
1	Employee-Environment congruency	5	Learning Environment
2	Transactional Psychological Contract	6	Work stress
3	Perceived crisis support	7	Optimism
4	Perceived Organization Ethics		

It is well known fact that negative factor loadings are as important as positive factor loadings as it is the absolute value that is considered when deciding a cut-off. That is, an item that loads -0.7 is as important as an item that loads +0.7.

For e.g.: in the case of Second factor, we saw that 10th variable "Psychological contract" which was included had negative loading that stated *"My employer fulfils his all obligation to me",* actually represented obligations those were not fulfilled i.e. breach of psychological contract. The negative factor loading of observable measure 10th with hidden Factor 2 (-0.788) meant that hidden Factor 2 has the characteristic "opposite" of whatever observable measure 10th measured. Thus it was combined with other similar variables as transactional contract that stated*" The commitment made by my employer relates on employment issues and not on our general well being"* and perception of organizational politics that states "*Nepotism / Favouritism decide who gets on the top. Merit is not important".* They all exhibited employee unfavourable perception to the climate of organization.

5.1 Scale Reliability: It refers to the confidence that can be placed on the questionnaire to give us the same numeric value when the measurement is repeated on the same respondents.

Next to satisfy that underlying items of above factors make up the scale for measuring these factors; reliability statistics was checked, that returns the value of Cronbach alpha coefficient which indicates the internal consistency of the scale. Malhotra, Naresh K.and Dash, Satyabhushan (2011) states that alpha value equal or above 0.70 is acceptable. It shows that items that make up the scale hang together and measure the same underlying construct.

In the below mentioned tables the first Cronbach's alpha employed the covariances among the items, whereas the alpha based on standardized items employs the correlations among items. The latter alpha is based on the assumption that all of the items have equal variances.

Table IX: First factor: Employee-Environment congruency

Item No.	Variables	Factor Loadings
1	Satisfaction with practices	0.913
2	Needs-supplies fit	0.904
3	Professional development	0.814
4	Passion: Feel valued	0.808
5	Demand-ability fit	0.745
6	Work Autonomy	0.732
7	Goal identity	0.678
8	Relational psychological contract	0.588
9	Colleague Relations	0.539
10	Relational Social Capital	0.473

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items		N of Items
.911	.917		10
Scale Statistics			
Mean	Variance	Std. Deviation	N of Items
35.9916	53.958	7.34558	10

Interpretation: The factor is based on doctors fit with the hospital environment i.e. goal, job, opportunities for development, support, expectation of wellness and existing procedures, which generates enthusiasm in them. The scale had very high alpha of .911 so was highly reliable. (*M* =35.99, *SD* = 7.34), the average congruency of doctors with their hospital environment was approximately 71.98% (35.9916/50).

Table X: Second factor: Transactional Psychological Contract

Item No.	Variables	Factor loadings
1	Psychological contract breach [R]	-0.788
2	Transactional Psychological Contract	0.732
3	Favouritism	0.691

ISSN 2348-1218 (print)
International Journal of Interdisciplinary Research and Innovations ISSN 2348-1226 (online)
Vol. 4, Issue 1, pp: (113-126), Month: January - March 2016, Available at: www.researchpublish.com

Reliability Statistics			
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items		N of Items
.735	.738		3
Scale Statistics			
Mean	Variance	Std. Deviation	N of Items
6.9412	6.497	2.54883	3

Interpretation: The factor captured dimensions related to type and fulfillment of psychological contract that influenced the attitude and behaviour of doctors in hospitals. It also incorporated their perception regarding nepotism and favouritism dominating over merit in awarding advancement that exhibited the breach of psychological contract. The first variable had negative loading which states "My employer fulfils his all obligation to me" should be understood that he did not fulfils all obligations and certainly signifies breach. The scale had very high alpha of .735 so was highly reliable. (*M* = 6.94, *SD* = 2.54), the mean of this factor is 46.28% that showed its fair presence in the hospitals.

Table XI: Third factor: Perceived crisis support

Item No.	Variables	Factor Loadings
1	Colleague Crisis support	0.835
2	Perception of organization change	0.771

Reliability Statistics		
a	Cronbach's Alpha Based on Standardized Items	N of Items
.713	.728	2

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
8.3782	1.373	1.17164	2

Interpretation: This factor focused on the quality of support and assistance received by the doctors from their team when they faced any problem at work. It also assured full support and information to them in the wake of organization change. Alpha is satisfactory i.e. 0.713. (*M* =8.38, *SD* = 1.17), the mean of this factor is 83.78% (8.3782/10).

Table XII: Fourth Factor: Perceived Organization Ethics

Item No.	Variables	Factor Loadings
1	Ethical Organization	0.83
2	Job Mobility	0.659
3	Perception of organization Politics	0.657
4	Turnover Intention	0.45

Reliability Statistics			
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items		N of Items
.749	.748		4
Scale Statistics			
Mean	Variance	Std. Deviation	N of Items
9.5798	12.093	3.47752	4

Interpretation: The factor captured the unethical practices prevailing in hospitals and the resultant job hopping behaviour of doctors due to anguish as their values clashed with it. The alpha coefficient is 0.75 that was acceptable for reliability. (*M* =9.58, *SD* = 3.48), the mean wais 47.89% showing that these existed in some of the hospitals and not all forming part of the sample.

ISSN 2348-1218 (print)
International Journal of Interdisciplinary Research and Innovations ISSN 2348-1226 (online)
Vol. 4, Issue 1, pp: (113-126), Month: January - March 2016, Available at: www.researchpublish.com

Table XIII: Fifth factor: Learning Environment

Item No.	Variables	Factor loadings
1	Altruism	0.522
2	Central Life Interest	0.677
3	Quick Information sharing	0.673
4	Knowledge shared with oneness	0.608

Reliability Statistics			
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items		N of Items
.726	.722		4
Scale Statistics			
Mean	Variance	Std. Deviation	N of Items
16.0840	5.739	2.39555	4

Interpretation: The factor was associated with the extra role behaviour exhibited by doctors to mentor their juniors, sharing experiences with their team and keeping updated. These days hospital too has an inbuilt system of knowledge sharing by facilitating accessibility of information that is required in this highly research oriented occupation involving medical cases dealt by doctors. This kind of environment fills passion in all medical practitioners as they help patients more resourcefully and get meaning out of their life. The alpha was 0.726 indicating acceptable reliability. (*M* =16.08, *SD* = 2.40), The mean of the scale was very high i.e. 80.42% (16.084/20)

Table XIV: Sixth factor: Work stress

Item No.	Variables	Factor loadings
1	Stress: work overload	0.75
2	Work life balance	0.711

Reliability Statistics			
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items		N of Items
.714	.714		2
Scale Statistics			
Mean	Variance	Std. Deviation	N of Items
4.4286	3.552	1.88469	2

Interpretation: The factor incorporates the stress and fatigue associated with overload of hectic work life of medical practitioners that affect their family life therefore making them unhappy and influencing their level of commitment. The alpha is satisfactory i.e. 0.714. (*M* = 4.42, *SD* = 1.88), the mean is 44.286% indicating fair presence of stress and its aftermaths in doctors.

Table XV: Seventh Factor: Optimism

Item No.	Variables	Factor loadings
1	Leader Member Relations	0.485
2	General Mood	0.803
3	Psychological Capital	-0.561

Reliability Statistics			
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items		N of Items
.715	.729		3
Scale Statistics			
Mean	Variance	Std. Deviation	N of Items
12.9496	2.743	1.65626	3

Interpretation: This factor delineated the optimism, positivity in life, stress handling power of medical practitioners. The kind of relationship they shared and trust generated by them in their superiors. The 3rd variable has negative factor loading so when it stated *"I feel that my hospital has no integrity and honesty"* that should be understood as that according to respondents hospital has integrity and honesty. Thus it is reverse coded. Alpha is satisfactory i.e. 0.715. (M =12.95, SD = 1.66), the mean of the scale was 86.30% (12.9496/15).

6. DISCUSSION

Seven explanatory were extracted from the above analysis and were given names according to the variables under them and on findings of the literature review conducted earlier. From the above analysis it was found that three scales had highest mean in explanatory variables which were factor 1, 3, 5 and 7. The mean of first factor was 71.98% related to employee congruency and fit to organizational environment including climate, culture, job which gave them feeling of worth and well being. The goal identity existed that is to provide best care and service to patients and save life, this created harmony between them. The third factor relates to perceived organization and co-workers support whenever one is in difficulty, which had mean of 83.78% that gave the doctors feeling of attachment to the hospital and influenced commitment. The fifth factor had mean value of 80.42% related to the learning culture in hospital that induced doctors to help their juniors and staff that was beyond their job description as they felt committed to work and liked to spend more time at workplace. The seventh factor commanded highest mean of 86.30% related to personality of medical practitioners that was associated with being always positive even in most and worst challenges and knocking off negativity and generating trust and receiving help from their superiors by their sheer optimism. This feeling of passion for work and organization impacted organizational commitment in them.

7. RESULTS

After conducting factor analysis it was revealed that the variables identified based on priori through literature review were all applicable and influenced the organizational commitment of registered medical practitioners in Lucknow. Therefore no variables were dropped for the future study. Only the questionnaire is revised according to newly constructed scales. There is also scope for adding new variables, increasing few items in existing variables related to outcomes, components and mediation of commitment to increase the scale reliability and capture more aspects associated to organizational commitment.

8. CONCLUSIONS

On the basis of factors extracted, multivariate analysis can be conducted to delve deep in the relationship between outcomes, causal and mediating variables of organizational commitment. Further extensive research can be conducted after addition and modification in the questionnaire for other Indian cities.

REFERENCES

[1] Malhotra, Naresh K.and Dash, Satyabhushan (2011). Marketing Research: An Applied Orientation, 6th edition, Pearson.

[2] Gaur, A. S. & Gaur, S.S. (2012). Statistical Method for Practice and Research: A Guide to Data Analysis Using SPSS. 2nd edition, New Delhi: SAGE.