Appendices

APPENDIX 1

A STUDY ON THE COMPETENCIES OF FACULTY – 360 DEGREE APPROACH

NAME OF COLLEGE

Department of_____

Respected Sir / Madam,

This questionnaire is designed for my Ph.D. thesis. I request you Sir / Madam to aid me in my data collection by filling the questionnaire with your true opinion. Your opinion would lead to a realistic output and provide valuable insight in the field of this research. I assure you that the data collected is **confidentia**l and for academic purpose only.

Yours Sincerely

Anupama Thomas

QUESTIONNAIRE

Important competencies required for faculty.

(Kindly rank in the order of importance, where **1** indicates the **Most Important** and **10** indicates the **Least Important**.)

S. No.	Competency	Rank
1.	Subject Knowledge	
2.	Teaching ability	
3.	Communication Skill	
4.	Flexibility	
5.	Time-management	
6.	Intellectual curiosity	
7.	Interpersonal relationship	
8.	Sincere and hardworking	
9.	Personal involvement in research/ Research skill	
10.	Awareness about industrial requirement	

The following statements are to be rated on a five-point scale.

5 – Excellent, 4 – Very Good, 3 – Good, 2 – Fair, 1 – Poor.

The rating should be made for yourself and 2 of your colleagues, listed below.

The rating will be kept ***confidential.***

		Yourself	**S2**	**S3**
S. No.		**Scale**		
K1.	Subject knowledge			
K2.	Use of innovative teaching methodology			
K3.	Engage in continuous learning/library usage			
K4.	Knowledge upgradation through refresher course			
K5.	Current information on the subject			
K6.	Citing appropriate subject specific examples			
S1.	Black board method of teaching			
S2	Use of ICT (information & communication technology)			
S3.	Clarity in expression and presentation of subject			
S4.	Students performance evaluation			
S5.	Activity based teaching			
S6.	Maintaining discipline			
S7.	Question paper setting /evaluation of answer sheets			
S8.	Guiding students in their project/research			

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		Yourself	**S2**	**S3**
S. No.		**Scale**		
M1.	Involvement in curriculum design			
M2.	Decision making ability in department activities			
M3.	Involvement in department activities			
M4.	Involved in outreach programs of the college			
M5.	Role as a mentor/ leader/guide/counsellor			
M6.	Initiative in organizing programs			
M7.	Approachable and helpful towards students			
M8.	Preparation of resource material/reading material/lab manuals/books etc			
M9.	Involvement in co-curricular/field trip			
M10.	Well-organised and prepared for class			
M11.	Assignments given are current and subject oriented			
M12.	Ability to motivate and challenge students			
T1.	Participation/Presentation at conferences			
T2.	Publications in indexed journals with high impact factor			
T3.	Interpersonal relationship with colleagues and superiors’			
T4.	Highly committed and dedicated to work			
T5.	Ability to self-motivate in case of setbacks and improve performance			
T6.	Always punctual to class			
T7.	Class time is used productively			
T8.	Encourages student participation in class			
T9.	Rapport with students			
T10	Treating all students equally and impartially			

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		Yourself	**S2**	**S3**
S. No		**Scale**		
C1.	Planning and completion of syllabus in time			
C2.	Efficient usage of technology and college resources			
C3.	After class hours: remedial coaching, career guidance, clarification, etc,			
C4.	Maintaining professional ethics			
C5.	Guidance to junior staff			
C6.	Membership to Professional committees/Bodies			
C7.	Maintains work-life balance			
C8.	Tolerant with broad outlook			
C9	Right amount of graded assignments, tests and quizzes are given for fair evaluation of students			

SOCIO-ECONOMIC PROFILE

1. Age (in years) _____
2. Gender

   a) male b) female
3. Marital Status

   a) Married b) Unmarried c) Divorcee d) Widow

4. Type of family

   a) Joint family b) Nuclear

5. Monthly Income (Personal)

   a) Up to 20,000 b) 20,001-30,000 c) 30,001-40,000 d) Above 40,000

6. Total family Income

   a) Up to 40,000 b) 40,001-60000 c) 60,001-80,000 d) above 80,001

7. Residential area

   a) Rural b) Urban c) Semi – Urban

8. Medium of instruction in school education

   a) English b) Vernacular (Tamil/Malayalam/etc)

JOB RELATED PROFILE

9. Educational Qualification (Completed)

   a) Post Graduate b) M.Phil. c) Ph.D. d) Any other _____

10. Additional Qualification

   a) SLET b) NET c) Any other_____

11. Category of employment

   a) government college b) Aided college c) self-finance college

12. Designation:

   a) Assistant Professor b) Associate Professor c) Professor

13.Teaching Experience: _____Years

14. Industrial Experience: _____ Years

15. Number of registered research Scholars _____.

16. Number of teaching hours per week _____.

17. Non-Academic coordinating duties

    a) Sports b) Cultural c) Events d) Any other_____

18. Number of faculty development programs attended

    a) 1-2 b) 3-4 c) 5-6 d) Above 7

*Suggestions:*_____

Thank You

A STUDY ON THE COMPETENCIES OF FACULTY – 360 DEGREE APPROACH

NAME OF COLLEGE

HOD - Department of_____

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		S1	**S2**	**S3**
S.No.	**Competency**	**Scale**		
K1.	Subject knowledge			
K2.	Use of innovative teaching methodology			
K3.	Engage in continuous learning/library usage			
K4.	Knowledge upgradation through refresher course			
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S2	Use of ICT (information & communication technology)			
S3.	Clarity in expression and presentation of subject			
S4.	Students performance evaluation			
S5.	Activity based teaching			
S6.	Maintaining discipline			
S7.	Question paper setting /evaluation of answer sheets			
S8.	Guiding students in their project/research			
C1.	Planning and completion of syllabus in time			
C2.	Efficient usage of technology and college resources			
C3.	After class hours: remedial coaching, career guidance, clarification, etc,			
C4.	Maintaining professional ethics			
C5.	Guidance to junior staff			
C6.	Membership to Professional committees/Bodies			
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		S1	**S2**	**S3**
S.No	**Competency**	**Scale**		
M1.	Involvement in curriculum design			
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M9.	Involvement in co-curricular/field trip			
T1.	Participation/Presentation at conferences			
T2.	Publications in indexed journals with high impact factor			
T3.	Interpersonal relationship with colleagues and superiors’			
T4.	Highly committed and dedicated to work			
T5.	Ability to self-motivate in case of setbacks and improve performance			

Thank you

A STUDY ON THE COMPETENCIES OF FACULTY – 360 DEGREE APPROACH

NAME OF COLLEGE

Department of_____

Dear Student

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K2.	Use of innovative teaching methodology			
K5.	Current information on the subject			
K6.	Mentioning appropriate subject specific examples			
S1.	Black board method of teaching			
S2	Use of ICT in teaching (information & communication technology)			
S3.	Clarity in expression and presentation of subject			
S4.	Students performance evaluation			
S5.	Activity based teaching			
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		S1	**S2**	**S3**
S.No	**Competency**	**Scale**		
M5.	Role as a mentor/ leader/guide/counsellor			
M7.	Approachable and helpful towards students			
M9.	Involvement in co-curricular/field trip			
M10.	Well-organised and prepared for class			
M11.	Assignments given are current and subject oriented			
M12.	Ability to motivate and challenge students			
T4.	Highly committed and dedicated to work			
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T7.	Class time is used productively			
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T9.	Rapport with students			
T10	Treating all students equally and impartially			

Thank You

APPENDIX - 2

ANALYSIS FOR STUDENTS

Comparison between Self and Students

Repeated Measures ANOVA for Knowledge Score by Gender

Source	Sum of Squares	df	Mean Square	F	Sig.
Between Gender	9.852	1	9.852	3.339	Ns
Error	1003.176	340	2.951		
Between Student-Teachers	73.357	1	73.357	13.956	**
Student-Teachers vs Gender	.007	1	.007	.001	Ns
Error(S-T)	1787.199	340	5.256		

Repeated Measures ANOVA for Knowledge Score by Medium of Instruction

Source	Sum of Squares	df	Mean Square	F	Sig.
Between Medium	15.255	1	15.255	5.198	*
Error	997.774	340	2.935		
Between Student-Teachers	73.357	1	73.357	14.119	**
Student-Teachers vs Medium	20.695	1	20.695	3.983	*
Error(S-T)	1766.510	340	5.196		

Repeated Measures ANOVA for Knowledge Score by Educational Qualification

Source	Sum of Squares	df	Mean Square	F	Sig.
Between Educational Qualification	13.840	2	6.920	2.348	Ns
Error	999.188	339	2.947		
Between Student-Teachers	73.357	1	73.357	14.010	**
Student-Teachers vs Gender	12.192	2	6.096	1.164	Ns
Error(S-T)	1775.01	339	5.236		

Repeated Measures ANOVA for Knowledge Score by Additional Qualification

Source	Sum of Squares	df	Mean Square	F	Sig.
Between Additional Qualification	1.491	3	.497	.166	Ns
Error	1011.537	338	2.993		
Between Student-Teachers	73.357	1	73.357	14.134	**
Student-Teachers vs Additional Qualification	33.002	3	11.001	2.120	Ns
Error(S-T)	1754.204	338	5.190		

Repeated Measures ANOVA for Knowledge Score by Nature of employment

Source	Sum of Squares	df	Mean Square	F	Sig.
Between Nature of employment	25.488	1	25.488	8.775	**
Error	987.540	340	2.905		
Between Student-Teachers	73.357	1	73.357	13.966	**
Student-Teachers vs Nature of employment	1.352	1	1.352	.257	Ns
Error(S-T)	1785.854	340	5.253		

Repeated Measures ANOVA for Knowledge Score by Designation

Source	Sum of Squares	df	Mean Square	F	Sig.
Between Designation	1.343	1	1.343	.451	Ns
Error	1011.686	340	2.976		
Between Student-Teachers	73.357	1	73.357	13.965	**
Student-Teachers vs Designation	1.197	1	1.197	.228	Ns
Error(S-T)	1786.009	340	5.253		

Repeated Measures ANOVA for Knowledge Score by Teaching Experience

Source	Sum of Squares	df	Mean Square	F	Sig.
Between Teaching Experience	10.288	3	3.429	1.156	Ns
Error	1002.741	338	2.967		
Between Student-Teachers	73.357	1	73.357	14.067	**
Student-Teachers vs Teaching Experience	24.609	3	8.203	1.573	Ns
Error(S-T)	1762.596	338	5.215		

Repeated Measures ANOVA for Knowledge Score by Industrial Experience

Source	Sum of Squares	df	Mean Square	F	Sig.
Between Industrial Experience	4.677	3	1.559	.523	Ns
Error	1008.351	338	2.983		
Between Student-Teachers	73.357	1	73.357	13.988	**
Student-Teachers vs Industrial Experience	14.703	3	4.901	.935	Ns
Error(S-T)	1772.503	338	5.244		

Repeated Measures ANOVA for Knowledge Score by Number of research scholars registered

Source	Sum of Squares	df	Mean Square	F	Sig.
Between No. of research scholars registered	16.506	3	5.502	1.866	Ns
Error	996.523	338	2.948		
Between Student-Teachers	73.357	1	73.357	13.916	**
Student-Teachers vs No. of research scholars registered	5.427	3	1.809	.343	Ns
Error(S-T)	1781.779	338	5.272		

Repeated Measures ANOVA for Skill Score by Gender

Source	Sum of Squares	df	Mean Square	F	Sig.
Between Gender	.827	1	.827	.097	Ns
Error	2912.238	340	8.565		
Between Student-Teachers	804.376	1	804.376	58.500	**
Student-Teachers vs Gender	6.729	1	6.729	.489	Ns
Error(S-T)	4674.989	340	13.750		

Repeated Measures ANOVA for Skill Score by Medium of instruction

Source	Sum of Squares	df	Mean Square	F	Sig.
Between Medium of instruction	41.279	1	41.279	4.887	*
Error	2871.786	340	8.446		
Between Student-Teachers	804.376	1	804.376	59.005	**
Student-Teachers vs Medium of instruction	46.741	1	46.741	3.429	Ns
Error(S-T)	4634.977	340	13.632		

Repeated Measures ANOVA for Skill Score by Educational Qualification

Source	Sum of Squares	df	Mean Square	F	Sig.
Between Educational Qualification	34.590	2	17.295	2.037	Ns
Error	2878.475	339	8.491		
Between Student-Teachers	804.376	1	804.376	58.440	**
Student-Teachers vs Educational Qualification	15.674	2	7.837	.569	Ns
Error(S-T)	4666.044	339	13.764		

Repeated Measures ANOVA for Skill Score by Additional Qualification

Source	Sum of Squares	df	Mean Square	F	Sig.
Between Additional Qualification	23.486	3	7.829	.916	Ns
Error	2889.579	338	8.549		
Between Student-Teachers	804.376	1	804.376	59.737	**
Student-Teachers vs Additional Qualification	130.457	3	43.486	3.229	*
Error(S-T)	4551.261	338	13.465		

Repeated Measures ANOVA for Skill Score by Nature of employment

Source	Sum of Squares	df	Mean Square	F	Sig.
Between Nature of employment	47.155	1	47.155	5.594	*
Error	2865.910	340	8.429		
Between Student-Teachers	804.376	1	804.376	58.431	**
Student-Teachers vs Nature of employment	1.194	1	1.194	.087	Ns
Error(S-T)	4680.523	340	13.766		

Repeated Measures ANOVA for Skill Score by Designation

Source	Sum of Squares	df	Mean Square	F	Sig.
Between Designation	.021	1	.021	.002	Ns
Error	2913.043	340	8.568		
Between Student-Teachers	804.376	1	804.376	58.636	**
Student-Teachers vs Designation	17.595	1	17.595	1.283	Ns
Error(S-T)	4664.123	340	13.718		

Repeated Measures ANOVA for Skill Score by Teaching Experience

Source	Sum of Squares	df	Mean Square	F	Sig.
Between Teaching Experience	19.777	3	6.592	.770	Ns
Error	2893.287	338	8.560		
Between Student-Teachers	804.376	1	804.376	58.960	**
Student-Teachers vs Teaching Experience	70.512	3	23.504	1.723	Ns
Error(S-T)	4611.206	338	13.643		

Repeated Measures ANOVA for Skill Score by Industrial Experience

Source	Sum of Squares	df	Mean Square	F	Sig.
Between Industrial Experience	7.884	3	2.628	.306	Ns
Error	2905.180	338	8.595		
Between Student-Teachers	804.376	1	804.376	58.467	**
Student-Teachers vs Industrial Experience	31.587	3	10.529	.765	Ns
Error(S-T)	4650.131	338	13.758		

Repeated Measures ANOVA for Skill Score by Number of research scholars registered

Source	Sum of Squares	df	Mean Square	F	Sig.
Between No. of research scholars registered	34.868	3	11.623	1.365	Ns
Error	2878.197	338	8.515		
Between Student-Teachers	804.376	1	804.376	58.238	**
Student-Teachers vs No. of research scholars registered	13.266	3	4.422	.320	Ns
Error(S-T)	4668.451	338	13.812		

Repeated Measures ANOVA for Motivation Score by Gender

Source	Sum of Squares	df	Mean Square	F	Sig.
Between Gender	.443	1	.443	.078	Ns
Error	1934.777	340	5.691		
Between Student-Teachers	523.250	1	523.250	52.824	**
Student-Teachers vs Gender	1.007	1	1.007	.102	Ns
Error(S-T)	3367.900	340	9.906		

Repeated Measures ANOVA for Motivation Score by Medium of instruction

Source	Sum of Squares	df	Mean Square	F	Sig.
Between Medium of instruction	5.862	1	5.862	1.033	Ns
Error	1929.359	340	5.675		
Between Student-Teachers	523.250	1	523.250	53.215	**
Student-Teachers vs Medium of instruction	25.739	1	25.739	2.618	Ns
Error(S-T)	3343.167	340	9.833		

Repeated Measures ANOVA for Motivation Score by Educational Qualification

Source	Sum of Squares	df	Mean Square	F	Sig.
Between Educational Qualification	38.877	2	19.439	3.475	*
Error	1896.343	339	5.594		
Between Student-Teachers	523.250	1	523.250	52.746	**
Student-Teachers vs Educational Qualification	5.968	2	2.984	.301	Ns
Error(S-T)	3362.938	339	9.920		

Repeated Measures ANOVA for Motivation Score by Additional Qualification

Source	Sum of Squares	df	Mean Square	F	Sig.
Between Additional Qualification	6.881	3	2.294	.402	Ns
Error	1928.339	338	5.705		
Between Student-Teachers	523.250	1	523.250	53.693	**
Student-Teachers vs Additional Qualification	75.010	3	25.003	2.566	Ns
Error(S-T)	3293.896	338	9.745		

Repeated Measures ANOVA for Motivation Score by Nature of employment

Source	Sum of Squares	df	Mean Square	F	Sig.
Between Nature of employment	35.671	1	35.671	6.385	*
Error	1899.550	340	5.587		
Between Student-Teachers	523.250	1	523.250	52.854	**
Student-Teachers vs Nature of employment	2.922	1	2.922	.295	Ns
Error(S-T)	3365.984	340	9.900		

Repeated Measures ANOVA for Motivation Score by Designation

Source	Sum of Squares	df	Mean Square	F	Sig.
Between Designation	2.271	1	2.271	.399	Ns
Error	1932.950	340	5.685		
Between Student-Teachers	523.250	1	523.250	53.186	**
Student-Teachers vs Designation	23.958	1	23.958	2.435	Ns
Error(S-T)	3344.949	340	9.838		

Repeated Measures ANOVA for Motivation Score by Teaching Experience

Source	Sum of Squares	df	Mean Square	F	Sig.
Between Teaching Experience	2.434	3	.811	.142	Ns
Error	1932.787	338	5.718		
Between Student-Teachers	523.250	1	523.250	53.249	**
Student-Teachers vs Teaching Experience	47.540	3	15.847	1.613	Ns
Error(S-T)	3321.366	338	9.827		

Repeated Measures ANOVA for Motivation Score by Industrial Experience

Source	Sum of Squares	df	Mean Square	F	Sig.
Between Industrial Experience	6.158	3	2.053	.360	Ns
Error	1929.063	338	5.707		
Between Student-Teachers	523.250	1	523.250	52.804	**
Student-Teachers vs Industrial Experience	19.551	3	6.517	.658	Ns
Error(S-T)	3349.355	338	9.909		

Repeated Measures ANOVA for Motivation Score by No. of research scholars registered

Source	Sum of Squares	df	Mean Square	F	Sig.
Between No. of research scholars registered	29.826	3	9.942	1.764	Ns
Error	1905.395	338	5.637		
Between Student-Teachers	523.250	1	523.250	52.773	**
Student-Teachers vs No. of research scholars registered	17.601	3	5.867	.592	Ns
Error(S-T)	3351.305	338	9.915		

Repeated Measures ANOVA for Traits Score by Gender

Source	Sum of Squares	df	Mean Square	F	Sig.
Between Gender	2.242	1	2.242	.403	Ns
Error	1893.859	340	5.570		
Between Student-Teachers	434.247	1	434.247	50.039	**
Student-Teachers vs Gender	15.323	1	15.323	1.766	Ns
Error(S-T)	2950.555	340	8.678		

Repeated Measures ANOVA for Traits Score by Medium of instruction

Source	Sum of Squares	df	Mean Square	F	Sig.
Between Medium of instruction	3.380	1	3.380	.607	Ns
Error	1892.721	340	5.567		
Between Student-Teachers	434.247	1	434.247	49.797	**
Student-Teachers vs Medium of instruction	.957	1	.957	.110	Ns
Error(S-T)	2964.921	340	8.720		

Repeated Measures ANOVA for Traits Score by Educational Qualification

Source	Sum of Squares	df	Mean Square	F	Sig.
Between Educational Qualification	56.057	2	28.028	5.164	**
Error	1840.044	339	5.428		
Between Student-Teachers	434.247	1	434.247	49.791	**
Student-Teachers vs Educational Qualification	9.297	2	4.648	.533	Ns
Error(S-T)	2956.581	339	8.721		

Repeated Measures ANOVA for Traits Score by Additional Qualification

Source	Sum of Squares	df	Mean Square	F	Sig.
Between Additional Qualification	11.620	3	3.873	.695	Ns
Error	1884.481	338	5.575		
Between Student-Teachers	434.247	1	434.247	50.642	**
Student-Teachers vs Additional Qualification	67.585	3	22.528	2.627	*
Error(S-T)	2898.293	338	8.575		

Repeated Measures ANOVA for Traits Score by Nature of employment

Source	Sum of Squares	df	Mean Square	F	Sig.
Between Nature of employment	57.388	1	57.388	10.612	**
Error	1838.713	340	5.408		
Between Student-Teachers	434.247	1	434.247	49.802	**
Student-Teachers vs Nature of employment	1.274	1	1.274	.146	Ns
Error(S-T)	2964.604	340	8.719		

Repeated Measures ANOVA for Traits Score by Designation

Source	Sum of Squares	df	Mean Square	F	Sig.
Between Designation	2.104	1	2.104	.378	Ns
Error	1893.997	340	5.571		
Between Student-Teachers	434.247	1	434.247	50.433	**
Student-Teachers vs Designation	38.328	1	38.328	4.451	*
Error(S-T)	2927.550	340	8.610		

Repeated Measures ANOVA for Traits Score by Teaching Experience

Source	Sum of Squares	df	Mean Square	F	Sig.
Between Teaching Experience	8.008	3	2.669	.478	Ns
Error	1888.093	338	5.586		
Between Student-Teachers	434.247	1	434.247	49.869	**
Student-Teachers vs Teaching Experience	22.681	3	7.560	.868	Ns
Error(S-T)	2943.197	338	8.708		

Repeated Measures ANOVA for Traits Score by Industrial Experience

Source	Sum of Squares	df	Mean Square	F	Sig.
Between Industrial Experience	38.525	3	12.842	2.337	Ns
Error	1857.576	338	5.496		
Between Student-Teachers	434.247	1	434.247	49.658	**
Student-Teachers vs Industrial Experience	10.180	3	3.393	.388	Ns
Error(S-T)	2955.698	338	8.745		

Repeated Measures ANOVA for Traits Score by No. of research scholars registered

Source	Sum of Squares	df	Mean Square	F	Sig.
Between No. of research scholars registered	56.081	3	18.694	3.434	*
Error	1840.021	338	5.444		
Between Student-Teachers	434.247	1	434.247	49.815	**
Student-Teachers vs No. of research scholars registered	19.446	3	6.482	.744	Ns
Error(S-T)	2946.432	338	8.717		

Repeated Measures ANOVA for Self-Concept Score by Gender

Source	Sum of Squares	df	Mean Square	F	Sig.
Between Gender	5.650	1	5.650	1.292	Ns
Error	1486.893	340	4.373		
Between Student-Teachers	437.840	1	437.840	63.868	**
Student-Teachers vs Gender	1.105	1	1.105	.161	Ns
Error(S-T)	2330.836	340	6.855		

Repeated Measures ANOVA for Self-Concept Score by Medium of instruction

Source	Sum of Squares	df	Mean Square	F	Sig.
Between Medium of instruction	10.430	1	10.430	2.393	Ns
Error	1482.113	340	4.359		
Between Student-Teachers	437.840	1	437.840	64.298	**
Student-Teachers vs Medium of instruction	16.681	1	16.681	2.450	Ns
Error(S-T)	2315.260	340	6.810		

Repeated Measures ANOVA for Self-Concept Score by Educational Qualification

Source	Sum of Squares	df	Mean Square	F	Sig.
Between Educational Qualification	51.613	2	25.806	6.071	**
Error	1440.930	339	4.251		
Between Student-Teachers	437.840	1	437.840	63.671	**
Student-Teachers vs Educational Qualification	.786	2	.393	.057	Ns
Error(S-T)	2331.155	339	6.877		

Repeated Measures ANOVA for Self-Concept Score by Additional Qualification

Source	Sum of Squares	df	Mean Square	F	Sig.
Between Additional Qualification	8.717	3	2.906	.662	Ns
Error	1483.826	338	4.390		
Between Student-Teachers	437.840	1	437.840	64.417	**
Student-Teachers vs Additional Qualification	34.565	3	11.522	1.695	Ns
Error(S-T)	2297.376	338	6.797		

Repeated Measures ANOVA for Self-Concept Score by Nature of employment

Source	Sum of Squares	df	Mean Square	F	Sig.
Between Nature of employment	20.662	1	20.662	4.773	*
Error	1471.881	340	4.329		
Between Student-Teachers	437.840	1	437.840	63.969	**
Student-Teachers vs Nature of employment	4.786	1	4.786	.699	Ns
Error(S-T)	2327.155	340	6.845		

Repeated Measures ANOVA for Self-Concept Score by Designation

Source	Sum of Squares	df	Mean Square	F	Sig.
Between Designation	.135	1	.135	.031	Ns
Error	1492.408	340	4.389		
Between Student-Teachers	437.840	1	437.840	64.354	**
Student-Teachers vs Designation	18.722	1	18.722	2.752	Ns
Error(S-T)	2313.219	340	6.804		

Repeated Measures ANOVA for Self-Concept Score by Teaching Experience

Source	Sum of Squares	df	Mean Square	F	Sig.
Between Teaching Experience	6.202	3	2.067	.470	Ns
Error	1486.341	338	4.397		
Between Student-Teachers	437.840	1	437.840	64.366	**
Student-Teachers vs Teaching Experience	32.740	3	10.913	1.604	Ns
Error(S-T)	2299.201	338	6.802		

Repeated Measures ANOVA for Self-Concept Score by Industrial Experience

Source	Sum of Squares	df	Mean Square	F	Sig.
Between Industrial Experience	16.995	3	5.665	1.298	Ns
Error	1475.548	338	4.366		
Between Student-Teachers	437.840	1	437.840	63.965	**
Student-Teachers vs Industrial Experience	18.322	3	6.107	.892	Ns
Error(S-T)	2313.619	338	6.845		

Repeated Measures ANOVA for Self-Concept Score by No. of research scholars registered

Source	Sum of Squares	df	Mean Square	F	Sig.
Between No. of research scholars registered	18.796	3	6.265	1.437	Ns
Error	1473.747	338	4.360		
Between Student-Teachers	437.840	1	437.840	64.681	**
Student-Teachers vs No. of research scholars registered	43.947	3	14.649	2.164	Ns
Error(S-T)	2287.994	338	6.769		

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Repeated Measures ANOVA for Knowledge Score by Gender

Source	Sum of Squares	df	Mean Square	F	Sig.	Table value
Between Gender	.466	1	.466	.075	Ns	3.869
Error	2103.659	340	6.187			
Between Peers-Teachers	67.580	1	67.580	6.772	**	6.710
Peers-Teachers vs Gender	18.805	1	18.805	1.884	Ns	3.869
Error(K)	3392.864	340	9.979			

Repeated Measures ANOVA for Knowledge Score by Medium of instruction in school education

Source	Sum of Squares	df	Mean Square	F	Sig.	Table value
Between Medium of instruction in school education	.740	1	.740	.120	Ns	3.869
Error	2103.384	340	6.186			
Between Peers-Teachers	67.580	1	67.580	6.739	**	6.710
Peers-Teachers vs Medium of instruction in school education	1.859	1	1.859	.185	Ns	3.869
Error(K)	3409.810	340	10.029			

Repeated Measures ANOVA for Knowledge Score by Educational Qualification

Source	Sum of Squares	df	Mean Square	F	Sig.	Table value
Between Educational Qualification	97.626	2	48.813	8.247	**	4.668
Error	2006.498	339	5.919			
Between Peers-Teachers	67.580	1	67.580	6.719	**	6.710
Peers-Teachers vs Educational Qualification	2.076	2	1.038	.103	Ns	3.022
Error(K)	3409.594	339	10.058			

Repeated Measures ANOVA for Knowledge Score by Additional Qualification

Source	Sum of Squares	df	Mean Square	F	Sig.	Table value
Between Additional Qualification	23.910	3	7.970	1.295	Ns	2.631
Error	2080.214	338	6.154			
Between Peers-Teachers	67.580	1	67.580	6.810	**	6.710
Peers-Teachers vs Additional Qualification	57.290	3	19.097	1.924	Ns	2.631
Error(K)	3354.380	338	9.924			

Repeated Measures ANOVA for Knowledge Score by Nature of employment

Source	Sum of Squares	df	Mean Square	F	Sig.	Table value
Between Nature of employment	48.083	1	48.083	7.951	**	3.869
Error	2056.041	340	6.047			
Between Peers-Teachers	67.580	1	67.580	6.753	**	6.710
Peers-Teachers vs Nature of employment	9.048	1	9.048	.904	Ns	3.869
Error(K)	3402.622	340	10.008			

Repeated Measures ANOVA for Knowledge Score by Designation

Source	Sum of Squares	df	Mean Square	F	Sig.	Table value
Between Designation	.968	1	.968	.156	Ns	3.869
Error	2103.156	340	6.186			
Between Peers-Teachers	67.580	1	67.580	6.743	**	6.710
Peers-Teachers vs Designation	4.069	1	4.069	.406	Ns	3.869
Error(K)	3407.601	340	10.022			

Repeated Measures ANOVA for Knowledge Score by Teaching Experience

Source	Sum of Squares	df	Mean Square	F	Sig.	Table value
Between Teaching Experience	11.689	3	3.896	.629	Ns	2.631
Error	2092.435	338	6.191			
Between Peers-Teachers	67.580	1	67.580	6.829	**	6.710
Peers-Teachers vs Teaching Experience	66.661	3	22.220	2.245	Ns	2.631
Error(K)	3345.009	338	9.896			

Repeated Measures ANOVA for Knowledge Score by Industrial Experience

Source	Sum of Squares	df	Mean Square	F	Sig.	Table value
Between Industrial Experience	5.911	3	1.970	.317	Ns	2.631
Error	2098.214	338	6.208			
Between Peers-Teachers	67.580	1	67.580	6.801	**	6.710
Peers-Teachers vs Industrial Experience	52.962	3	17.654	1.777	Ns	2.631
Error(K)	3358.707	338	9.937			

Repeated Measures ANOVA for Knowledge Score by No. of research scholars registered

Source	Sum of Squares	df	Mean Square	F	Sig.	Table value
Between No. of research scholars registered	32.964	3	10.988	1.793	Ns	2.631
Error	2071.160	338	6.128			
Between Peers-Teachers	67.580	1	67.580	6.747	**	6.710
Peers-Teachers vs No. of research scholars registered	25.982	3	8.661	.865	Ns	2.631
Error(K)	3385.688	338	10.017			

Repeated Measures ANOVA for Skills by Gender

Source	Sum of Squares	df	Mean Square	F	Sig.	Table value
Between Gender	15.133	1	15.133	1.768	Ns	3.869
Error	2910.782	340	8.561			
Between Peers-Teachers	6322.106	1	6322.106	486.799	**	6.710
Peers-Teachers vs Gender	1.654	1	1.654	.127	Ns	3.869
Error(S)	4415.616	340	12.987			

Repeated Measures ANOVA for Skills score by Medium of instruction in school education

Source	Sum of Squares	df	Mean Square	F	Sig.	Table value
Between Medium of instruction in school education	5.102	1	5.102	.594	Ns	3.869
Error	2920.814	340	8.591			
Between Peers-Teachers	6322.106	1	6322.106	486.619	**	6.710
Peers-Teachers vs Medium of instruction in school education	.025	1	.025	.002	Ns	3.869
Error(S)	4417.244	340	12.992			

Repeated Measures ANOVA for Skills score by Educational Qualification

Source	Sum of Squares	df	Mean Square	F	Sig.	Table value
Between Educational Qualification	128.247	2	64.124	7.770	**	4.668
Error	2797.668	339	8.253			
Between Peers-Teachers	6322.106	1	6322.106	485.289	**	6.710
Peers-Teachers vs Educational Qualification	.942	2	.471	.036	Ns	3.022
Error(S)	4416.327	339	13.028			

Repeated Measures ANOVA for Skills score by Additional Qualification

Source	Sum of Squares	df	Mean Square	F	Sig.	Table value
Additional Qualification	51.787	3	17.262	2.030	Ns	2.631
Error	2874.128	338	8.503			
Between Peers-Teachers	6322.106	1	6322.106	492.658	**	6.710
Peers-Teachers vs Additional Qualification	79.833	3	26.611	2.074	Ns	2.631
Error(S)	4337.437	338	12.833			

Repeated Measures ANOVA for Skills score by Nature of employment

Source	Sum of Squares	df	Mean Square	F	Sig.	Table value
Between Nature of employment	40.998	1	40.998	4.832	*	3.869
Error	2884.918	340	8.485			
Between Peers-Teachers	6322.106	1	6322.106	487.783	**	6.710
Peers-Teachers vs Nature of employment	10.565	1	10.565	.815	Ns	3.869
Error(S)	4406.705	340	12.961			

Repeated Measures ANOVA for Skills score by Designation

Source	Sum of Squares	df	Mean Square	F	Sig.	Table value
Between Designation	7.116	1	7.116	.829	Ns	3.869
Error	2918.799	340	8.585			
Between Peers-Teachers	6322.106	1	6322.106	486.710	**	6.710
Peers-Teachers vs Designation	.847	1	.847	.065	Ns	3.869
Error(S)	4416.423	340	12.989			

Repeated Measures ANOVA for Skills score by Teaching Experience

Source	Sum of Squares	df	Mean Square	F	Sig.	Table value
Teaching Experience	31.452	3	10.484	1.224	Ns	2.631
Error	2894.463	338	8.564			
Between Peers-Teachers	6322.106	1	6322.106	489.291	**	6.710
Peers-Teachers vs Teaching Experience	49.990	3	16.663	1.290	Ns	2.631
Error(S)	4367.279	338	12.921			

Repeated Measures ANOVA for Skills score by Industrial Experience

Source	Sum of Squares	df	Mean Square	F	Sig.	Table value
Between Industrial Experience	9.185	3	3.062	.355	Ns	2.631
Error	2916.730	338	8.629			
Between Peers-Teachers	6322.106	1	6322.106	487.557	**	6.710
Peers-Teachers vs Industrial Experience	34.454	3	11.485	.886	Ns	2.631
Error(S)	4382.815	338	12.967			

Repeated Measures ANOVA for Skills score by No. of research scholars registered

Source	Sum of Squares	df	Mean Square	F	Sig.	Table value
Between No. of research scholars registered	36.530	3	12.177	1.424	Ns	2.631
Error	2889.386	338	8.548			
Between Peers-Teachers	6322.106	1	6322.106	485.858	**	6.710
Peers-Teachers vs No. of research scholars registered	19.131	3	6.377	.490	Ns	2.631
Error(S)	4398.138	338	13.012			

Repeated Measures ANOVA for Motivation score by Gender

Source	Sum of Squares	df	Mean Square	F	Sig.	Table value
Between Gender	37.610	1	37.610	1.744	Ns	3.869
Error	7332.229	340	21.565			
Between Peers-Teachers	684.000	1	684.000	23.813	**	6.710
Peers-Teachers vs Gender	1.064	1	1.064	.037	Ns	3.869
Error(M)	9765.936	340	28.723			

Repeated Measures ANOVA for Motivation score by Medium of instruction in school education

Source	Sum of Squares	df	Mean Square	F	Sig.	Table value
Between Medium of instruction in school education	.262	1	.262	.012	Ns	3.869
Error	7369.577	340	21.675			
Between Peers-Teachers	684.000	1	684.000	23.811	**	6.710
Peers-Teachers vs Medium of instruction in school education	.022	1	.022	.001	Ns	3.869
Error(M)	9766.978	340	28.726			

Repeated Measures ANOVA for Motivation score by Educational Qualification

Source	Sum of Squares	df	Mean Square	F	Sig.	Table value
Between Educational Qualification	245.362	2	122.681	5.837	**	4.668
Error	7124.477	339	21.016			
Between Peers-Teachers	684.000	1	684.000	23.750	**	6.710
Peers-Teachers vs Educational Qualification	3.825	2	1.912	.066	Ns	3.022
Error(M)	9763.175	339	28.800			

Repeated Measures ANOVA for Motivation score by Additional Qualification

Source	Sum of Squares	df	Mean Square	F	Sig.	Table value
Between Additional Qualification	83.844	3	27.948	1.297	Ns	2.631
Error	7285.996	338	21.556			
Between Peers-Teachers	684.000	1	684.000	23.853	**	6.710
Peers-Teachers vs Additional Qualification	74.650	3	24.883	.868	Ns	2.631
Error(M)	9692.350	338	28.676			

Repeated Measures ANOVA for Motivation score by Nature of employment

Source	Sum of Squares	df	Mean Square	F	Sig.	Table value
Between Nature of employment	58.354	1	58.354	2.714	Ns	3.869
Error	7311.485	340	21.504			
Between Peers-Teachers	684.000	1	684.000	23.913	**	6.710
Peers-Teachers vs Nature of employment	41.632	1	41.632	1.455	Ns	3.869
Error(M)	9725.368	340	28.604			

Repeated Measures ANOVA for Motivation score by Designation

Source	Sum of Squares	df	Mean Square	F	Sig.	Table value
Between Designation	62.396	1	62.396	2.903	Ns	3.869
Error	7307.443	340	21.492			
Between Peers-Teachers	684.000	1	684.000	23.827	**	6.710
Peers-Teachers vs Designation	6.692	1	6.692	.233	Ns	3.869
Error(M)	9760.308	340	28.707			

Repeated Measures ANOVA for Motivation score by Teaching experience

Source	Sum of Squares	df	Mean Square	F	Sig.	Table value
Between Teaching Experience	45.705	3	15.235	.703	Ns	2.631
Error	7324.134	338	21.669			
Between Peers-Teachers	684.000	1	684.000	23.779	**	6.710
Peers-Teachers vs Teaching Experience	44.349	3	14.783	.514	Ns	2.631
Error(M)	9722.651	338	28.765			

Repeated Measures ANOVA for Motivation score by Industrial Experience

Source	Sum of Squares	df	Mean Square	F	Sig.	Table value
Between Industrial Experience	55.037	3	18.346	.848	Ns	2.631
Error	7314.803	338	21.641			
Between Peers-Teachers	684.000	1	684.000	24.047	**	6.710
Peers-Teachers vs Industrial Experience	152.669	3	50.890	1.789	Ns	2.631
Error(M)	9614.331	338	28.445			

Repeated Measures ANOVA for Motivation score by No. of research scholars registered

Source	Sum of Squares	df	Mean Square	F	Sig.	Table value
Between No. of research scholars registered	49.993	3	16.664	.769	Ns	2.631
Error	7319.847	338	21.656			
Between Peers-Teachers	684.000	1	684.000	23.775	**	6.710
Peers-Teachers vs No. of research scholars registered	42.701	3	14.234	.495	Ns	2.631
Error(M)	9724.299	338	28.770			

Repeated Measures ANOVA for Traits score by Gender

Source	Sum of Squares	df	Mean Square	F	Sig.	Table value
Between Gender	36.950	1	36.950	2.113	Ns	3.869
Error	5945.341	340	17.486			
Between Peers-Teachers	1225.351	1	1225.351	48.682	**	6.710
Peers-Teachers vs Between Gender	9.717	1	9.717	.386	Ns	3.869
Error(T)	8558.057	340	25.171			

Repeated Measures ANOVA for Traits score by Medium of instruction in school education

Source	Sum of Squares	df	Mean Square	F	Sig.	Table value
Between Medium of instruction in school education	6.822	1	6.822	.388	Ns	3.869
Error	5975.469	340	17.575			
Between Peers-Teachers	1225.351	1	1225.351	48.641	**	6.710
Peers-Teachers vs Medium of instruction in school education	2.648	1	2.648	.105	Ns	3.869
Error(T)	8565.126	340	25.192			

Repeated Measures ANOVA for Traits score by Educational Qualification

Source	Sum of Squares	df	Mean Square	F	Sig.	Table value
Between Educational Qualification	288.015	2	144.008	8.573	**	4.668
Error	5694.275	339	16.797			
Between Peers-Teachers	1225.351	1	1225.351	48.577	**	6.710
Peers-Teachers vs Educational Qualification	16.448	2	8.224	.326	Ns	3.022
Error(T)	8551.325	339	25.225			

Repeated Measures ANOVA for Traits score by Additional Qualification

Source	Sum of Squares	df	Mean Square	F	Sig.	Table value
Between Additional Qualification	98.063	3	32.688	1.878	Ns	2.631
Error	5884.227	338	17.409			
Between Peers-Teachers	1225.351	1	1225.351	48.622	**	6.710
Peers-Teachers vs Additional Qualification	49.651	3	16.550	.657	Ns	2.631
Error(T)	8518.123	338	25.202			

Repeated Measures ANOVA for Traits score by Nature of employment

Source	Sum of Squares	df	Mean Square	F	Sig.	Table value
Between Nature of employment	45.238	1	45.238	2.591	Ns	3.869
Error	5937.052	340	17.462			
Between Peers-Teachers	1225.351	1	1225.351	48.810	**	6.710
Peers-Teachers vs Nature of employment	32.322	1	32.322	1.288	Ns	3.869
Error(T)	8535.452	340	25.104			

Repeated Measures ANOVA for Traits by score by Designation

Source	Sum of Squares	df	Mean Square	F	Sig.	Table value
Between Designation	22.009	1	22.009	1.256	Ns	3.869
Error	5960.281	340	17.530			
Between Peers-Teachers	1225.351	1	1225.351	48.649	**	6.710
Peers-Teachers vs Designation	3.922	1	3.922	.156	Ns	3.869
Error(T)	8563.852	340	25.188			

Repeated Measures ANOVA for Traits score by Teaching Experience

Source	Sum of Squares	df	Mean Square	F	Sig.	Table value
Between Teaching Experience	88.566	3	29.522	1.693	Ns	2.631
Error	5893.724	338	17.437			
Between Peers-Teachers	1225.351	1	1225.351	48.511	**	6.710
Peers-Teachers vs Teaching Experience	30.063	3	10.021	.397	Ns	2.631
Error(T)	8537.711	338	25.259			

Repeated Measures ANOVA for Traits score by Industrial Experience

Source	Sum of Squares	df	Mean Square	F	Sig.	Table value
Between Industrial Experience	35.505	3	11.835	.673	Ns	2.631
Error	5946.785	338	17.594			
Between Peers-Teachers	1225.351	1	1225.351	48.979	**	6.710
Peers-Teachers vs Industrial Experience	111.678	3	37.226	1.488	Ns	2.631
Error(T)	8456.096	338	25.018			

Repeated Measures ANOVA for Traits score by No. of research scholars registered

Source	Sum of Squares	df	Mean Square	F	Sig.	Table value
Between No. of research scholars registered	117.234	3	39.078	2.252	Ns	2.631
Error	5865.056	338	17.352			
Between Peers-Teachers	1225.351	1	1225.351	48.470	**	6.710
Peers-Teachers vs No. of research scholars registered	22.948	3	7.649	.303	Ns	2.631
Error(T)	8544.826	338	25.281			

Repeated Measures ANOVA for Self-Concept score by Gender

Source	Sum of Squares	df	Mean Square	F	Sig.	Table value
Between Gender	9.553	1	9.553	.791	Ns	3.869
Error	4104.749	340	12.073			
Between Peers-Teachers	220.094	1	220.094	11.112	**	6.710
Peers-Teachers vs Between Gender	4.579	1	4.579	.231	Ns	3.869
Error(C)	6734.077	340	19.806			

Repeated Measures ANOVA for Self-Concept Score by Medium of Instruction in school education

Source	Sum of Squares	df	Mean Square	F	Sig.	Table value
Between Medium of instruction in school education	3.446	1	3.446	.285	Ns	3.869
Error	4110.856	340	12.091			
Between Peers-Teachers	220.094	1	220.094	11.109	**	6.710
Peers-Teachers vs Medium of instruction in school education	2.460	1	2.460	.124	Ns	3.869
Error(C)	6736.196	340	19.812			

Repeated Measures ANOVA for Self-Concept score by Educational Qualification

Source	Sum of Squares	df	Mean Square	F	Sig.	Table value
Between Educational Qualification	203.905	2	101.953	8.838	**	4.668
Error	3910.397	339	11.535			
Between Peers-Teachers	220.094	1	220.094	11.078	**	6.710
Peers-Teachers vs Between Educational Qualification	3.329	2	1.664	.084	Ns	3.022
Error(C)	6735.328	339	19.868			

Repeated Measures ANOVA for Self-Concept score by Additional Qualification

Source	Sum of Squares	df	Mean Square	F	Sig.	Table value
Between Additional Qualification	88.174	3	29.391	2.467	Ns	2.631
Error	4026.128	338	11.912			
Between Peers-Teachers	220.094	1	220.094	11.177	**	6.710
Peers-Teachers vs Additional Qualification	82.968	3	27.656	1.404	Ns	2.631
Error(C)	6655.688	338	19.691			

Repeated Measures ANOVA for Self-Concept score by Nature of employment

Source	Sum of Squares	df	Mean Square	F	Sig.	Table value
Between Nature of employment	15.793	1	15.793	1.310	Ns	3.869
Error	4098.509	340	12.054			
Between Peers-Teachers	220.094	1	220.094	11.112	**	6.710
Peers-Teachers vs Nature of employment	4.031	1	4.031	.204	Ns	3.869
Error(C)	6734.625	340	19.808			

Repeated Measures ANOVA for Self-Concept score by Designation

Source	Sum of Squares	df	Mean Square	F	Sig.	Table value
Between Designation	3.318	1	3.318	.274	Ns	3.869
Error	4110.983	340	12.091			
Between Peers-Teachers	220.094	1	220.094	11.113	**	6.710
Peers-Teachers vs Designation	5.071	1	5.071	.256	Ns	3.869
Error(C)	6733.586	340	19.805			

Repeated Measures ANOVA for Self-Concept score by Teaching Experience

Source	Sum of Squares	df	Mean Square	F	Sig.	Table value
Between Teaching Experience	81.121	3	27.040	2.266	Ns	2.631
Error	4033.181	338	11.932			
Between Peers-Teachers	220.094	1	220.094	11.071	**	6.710
Peers-Teachers vs Teaching Experience	19.292	3	6.431	.323	Ns	2.631
Error(C)	6719.364	338	19.880			

Repeated Measures ANOVA for Self-Concept score by Industrial Experience

Source	Sum of Squares	df	Mean Square	F	Sig.	Table value
Between Industrial Experience	22.952	3	7.651	.632	Ns	2.631
Error	4091.350	338	12.105			
Between Peers-Teachers	220.094	1	220.094	11.303	**	6.710
Peers-Teachers vs Industrial Experience	156.855	3	52.285	2.685	*	2.631
Error(C)	6581.802	338	19.473			

Repeated Measures ANOVA for Self-Concept score by No. of research scholars registered

Source	Sum of Squares	df	Mean Square	F	Sig.	Table value
Between No. of research scholars registered	26.989	3	8.996	.744	Ns	2.631
Error	4087.313	338	12.093			
Between Peers-Teachers	220.094	1	220.094	11.100	**	6.710
Peers-Teachers vs No. of research scholars registered	36.709	3	12.236	.617	Ns	2.631
Error(C)	6701.947	338	19.828			

ANALYSIS FOR HODs
Comparison between Faculty (Self) and HOD

Repeated Measures ANOVA for Knowledge Score by Gender

Source	Sum of Squares	df	Mean Square	F	Sig.	Table value
Between Gender	6.404	1	6.404	1.539	Ns	3.869
Error	1414.793	340	4.161			
Between Faculty-HOD	242.177	1	242.177	32.440	**	6.710
Faculty-HOD vs Gender	.063	1	.063	.008	Ns	3.869
Error(H-T)	2538.260	340	7.465			

Repeated Measures ANOVA for Knowledge Score by Medium Of Instruction

Source	Sum of Squares	df	Mean Square	F	Sig.	Table value
Between MOI[$]	6.382	1	6.382	1.534	Ns	3.869
Error	1414.815	340	4.161			
Between HOD-Teachers	242.177	1	242.177	32.692	**	6.710
HOD-Teachers vs MOI[$]	19.672	1	19.672	2.656	Ns	3.869
Error(H-T)	2518.651	340	7.408			

$- Medium Of Instruction

Repeated Measures ANOVA for Knowledge Score by Educational Qualification

Source	Sum of Squares	df	Mean Square	F	Sig.	Table value
Between Educational Qualification	38.552	2	19.276	4.726	**	4.668
Error	1382.644	339	4.079			
Between Faculty-HOD	242.177	1	242.177	32.371	**	6.710
Faculty-HOD vs Educational Qualification	2.188	2	1.094	.146	Ns	3.022
Error(H-T)	2536.135	339	7.481			

Repeated Measures ANOVA for Knowledge Score by Additional Qualification

Source	Sum of Squares	df	Mean Square	F	Sig.	Table value
Between Additional Qualification	10.284	3	3.428	.821	Ns	2.631
Error	1410.913	338	4.174			
Between Faculty-HOD	242.177	1	242.177	32.731	**	6.710
Faculty-HOD vs Additional Qualification	37.493	3	12.498	1.689	Ns	2.631
Error(H-T)	2500.830	338	7.399			

Repeated Measures ANOVA for Knowledge Score by Nature of employment

Source	Sum of Squares	df	Mean Square	F	Sig.	Table value
Between Nature of employment	23.246	1	23.246	5.654	*	3.869
Error	1397.950	340	4.112			
Between Faculty-HOD	242.177	1	242.177	32.449	**	6.710
Faculty-HOD vs Nature of employment	.761	1	.761	.102	Ns	3.869
Error(H-T)	2537.562	340	7.463			

Repeated Measures ANOVA for Knowledge Score by Designation

Source	Sum of Squares	df	Mean Square	F	Sig.	Table value
Between Designation	.108	1	.108	.026	Ns	3.869
Error	1421.088	340	4.180			
Between Faculty-HOD	242.177	1	242.177	32.444	**	6.710
Faculty-HOD vs Designation	.419	1	.419	.056	Ns	3.869
Error(H-T)	2537.905	340	7.464			

Repeated Measures ANOVA for Knowledge Score by Teaching Experience

Source	Sum of Squares	df	Mean Square	F	Sig.	Table value
Between Teaching Experience	11.220	3	3.740	.897	Ns	2.631
Error	1409.976	338	4.172			
Between Faculty-HOD	242.177	1	242.177	33.045	**	6.710
Faculty-HOD vs Teaching Experience	61.190	3	20.397	2.783	*	2.631
Error(H-T)	2477.133	338	7.329			

Repeated Measures ANOVA for Knowledge Score by Industrial Experience

Source	Sum of Squares	df	Mean Square	F	Sig.	Table value
Between Industrial Experience	12.883	3	4.294	1.031	Ns	2.631
Error	1408.313	338	4.167			
Between Faculty-HOD	242.177	1	242.177	32.640	**	6.710
Faculty-HOD vs Industrial Experience	30.514	3	10.171	1.371	Ns	2.631
Error(H-T)	2507.810	338	7.420			

Repeated Measures ANOVA for Knowledge Score by No. of research scholars registered

Source	Sum of Squares	df	Mean Square	F	Sig.	Table value
Between No. of research scholars registered	18.501	3	6.167	1.486	Ns	2.631
Error	1402.695	338	4.150			
Between Faculty-HOD	242.177	1	242.177	32.334	**	6.710
Faculty-HOD vs No. of research scholars registered	6.769	3	2.256	.301	Ns	2.631
Error(H-T)	2531.554	338	7.490			

Repeated Measures ANOVA for skill Score by Gender

Source	Sum of Squares	df	Mean Square	F	Sig.	Table value
Between Gender	21.357	1	21.357	1.657	Ns	3.869
Error	4382.485	340	12.890			
Between Faculty-HOD	1557.053	1	1557.053	62.862	**	6.710
Faculty-HOD vs Gender	5.383	1	5.383	.217	Ns	3.869
Error(H-T)	8421.565	340	24.769			

Repeated Measures ANOVA for Skill Score by Medium Of Instruction

Source	Sum of Squares	df	Mean Square	F	Sig.	Table value
Between MOI[$]	19.370	1	19.370	1.502	Ns	3.869
Error	4384.472	340	12.896			
Between HOD-Teachers	1557.053	1	1557.053	62.898	**	6.710
HOD-Teachers vs MOI[$]	10.171	1	10.171	.411	Ns	3.869
Error(H-T)	8416.777	340	24.755			

Repeated Measures ANOVA for skill Score by Educational Qualification

Source	Sum of Squares	df	Mean Square	F	Sig.	Table value
Between Educational Qualification	111.707	2	55.853	4.411	*	3.022
Error	4292.135	339	12.661			
Between Faculty-HOD	1557.053	1	1557.053	62.797	**	6.710
Faculty-HOD vs Educational Qualification	21.483	2	10.741	.433	Ns	3.022
Error(H-T)	8405.464	339	24.795			

Repeated Measures ANOVA for skill Score by Additional Qualification

Source	Sum of Squares	df	Mean Square	F	Sig.	Table value
Between Additional Qualification	66.170	3	22.057	1.719	Ns	2.398
Error	4337.672	338	12.833			
Between Faculty-HOD	1557.053	1	1557.053	63.069	**	6.711
Faculty-HOD vs Additional Qualification	82.388	3	27.463	1.112	Ns	2.398
Error(H-T)	8344.559	338	24.688			

Repeated Measures ANOVA for skill Score by Nature of employment

Source	Sum of Squares	df	Mean Square	F	Sig.	Table value
Between Nature of employment	59.504	1	59.504	4.657	*	3.022
Error	4344.339	340	12.777			
Between Faculty-HOD	1557.053	1	1557.053	62.837	**	6.710
Faculty-HOD vs Nature of employment	1.950	1	1.950	.079	Ns	3.022
Error(H-T)	8424.997	340	24.779			

Repeated Measures ANOVA for skill Score by Designation

Source	Sum of Squares	df	Mean Square	F	Sig.	Table value
Between Designation	1.708	1	1.708	.132	Ns	3.869
Error	4402.134	340	12.947			
Between Faculty-HOD	1557.053	1	1557.053	62.882	**	6.710
Faculty-HOD vs Designation	8.092	1	8.092	.327	Ns	3.869
Error(H-T)	8418.855	340	24.761			

Repeated Measures ANOVA for skill Score by Teaching Experience

Source	Sum of Squares	df	Mean Square	F	Sig.	Table value
Between Teaching Experience	14.089	3	4.696	.362	Ns	2.631
Error	4389.753	338	12.987			
Between Faculty-HOD	1557.053	1	1557.053	62.584	**	6.710
Faculty-HOD vs Teaching Experience	17.755	3	5.918	.238	Ns	2.631
Error(H-T)	8409.193	338	24.879			

Repeated Measures ANOVA for skill Score by Industrial Experience

Source	Sum of Squares	df	Mean Square	F	Sig.	Table value
Between Industrial Experience	86.626	3	28.875	2.261	Ns	2.631
Error	4317.217	338	12.773			
Between Faculty-HOD	1557.053	1	1557.053	63.229	**	6.710
Faculty-HOD vs Industrial Experience	103.459	3	34.486	1.400	Ns	2.631
Error(H-T)	8323.489	338	24.626			

Repeated Measures ANOVA for skill Score by No. of research scholars registered

Source	Sum of Squares	df	Mean Square	F	Sig.	Table value
Between No. of research scholars registered	64.481	3	21.494	1.674	Ns	2.631
Error	4339.361	338	12.838			
Between Faculty-HOD	1557.053	1	1557.053	62.863	**	6.710
Faculty-HOD vs No. of research scholars registered	55.019	3	18.340	.740	Ns	2.631
Error(H-T)	8371.928	338	24.769			

Repeated Measures ANOVA for Motivation Score by Gender

Source	Sum of Squares	df	Mean Square	F	Sig.	Table value
Between Gender	17.224	1	17.224	.759	Ns	3.869
Error	7710.982	340	22.679			
Between Faculty-HOD	2796.329	1	2796.329	75.034	**	6.710
Faculty-HOD vs Gender	.152	1	.152	.004	Ns	3.869
Error(H-T)	12671.019	340	37.268			

Repeated Measures ANOVA for Motivation Score by Medium Of Instruction

Source	Sum of Squares	df	Mean Square	F	Sig.	Table value
Between MOI[$]	35.596	1	35.596	1.573	Ns	3.869
Error	7692.609	340	22.625			
Between HOD-Teachers	2796.329	1	2796.329	75.455	**	6.710
HOD-Teachers vs MOI[$]	70.936	1	70.936	1.914	Ns	3.869
Error(H-T)	12600.235	340	37.060			

$- Medium Of Instruction

Repeated Measures ANOVA for Motivation Score by Educational Qualification

Source	Sum of Squares	df	Mean Square	F	Sig.	Table value
Between Educational Qualification	108.099	2	54.050	2.405	Ns	3.022
Error	7620.106	339	22.478			
Between Faculty-HOD	2796.329	1	2796.329	75.224	**	6.710
Faculty-HOD vs Educational Qualification	69.451	2	34.726	.934	Ns	3.022
Error(H-T)	12601.720	339	37.173			

Repeated Measures ANOVA for Motivation Score by Additional Qualification

Source	Sum of Squares	df	Mean Square	F	Sig.	Table value
Between Additional Qualification	40.225	3	13.408	.589	Ns	2.631
Error	7687.980	338	22.746			
Between Faculty-HOD	2796.329	1	2796.329	74.938	**	6.710
Faculty-HOD vs Additional Qualification	58.638	3	19.546	.524	Ns	2.631
Error(H-T)	12612.533	338	37.315			

Repeated Measures ANOVA for Motivation Score by Nature of employment

Source	Sum of Squares	df	Mean Square	F	Sig.	Table value
Between Nature of employment	68.630	1	68.630	3.046	Ns	3.869
Error	7659.576	340	22.528			
Between Faculty-HOD	2796.329	1	2796.329	75.067	**	6.710
Faculty-HOD vs Nature of employment	5.790	1	5.790	.155	Ns	3.869
Error(H-T)	12665.381	340	37.251			

Repeated Measures ANOVA for Motivation Score by Designation

Source	Sum of Squares	df	Mean Square	F	Sig.	Table value
Between Designation	4.008	1	4.008	.176	Ns	3.869
Error	7724.198	340	22.718			
Between Faculty-HOD	2796.329	1	2796.329	75.310	**	6.710
Faculty-HOD vs Designation	46.737	1	46.737	1.259	Ns	3.869
Error(H-T)	12624.434	340	37.131			

Repeated Measures ANOVA for Motivation Score by Teaching Experience

Source	Sum of Squares	df	Mean Square	F	Sig.	Table value
Between Teaching Experience	47.703	3	15.901	.700	Ns	2.631
Error	7680.502	338	22.723			
Between Faculty-HOD	2796.329	1	2796.329	74.971	**	6.710
Faculty-HOD vs Teaching Experience	64.234	3	21.411	.574	Ns	2.631
Error(H-T)	12606.937	338	37.299			

Repeated Measures ANOVA for motivation Score by Industrial Experience

Source	Sum of Squares	df	Mean Square	F	Sig.	Table value
Between Industrial Experience	69.156	3	23.052	1.017	Ns	2.631
Error	7659.049	338	22.660			
Between Faculty-HOD	2796.329	1	2796.329	75.483	**	6.710
Faculty-HOD vs Industrial Experience	149.605	3	49.868	1.346	Ns	2.631
Error(H-T)	12521.566	338	37.046			

Repeated Measures ANOVA for Motivation Score by No. of research scholars registered

Source	Sum of Squares	df	Mean Square	F	Sig.	Table value
Between No. of research scholars registered	52.215	3	17.405	.766	Ns	2.631
Error	7675.990	338	22.710			
Between Faculty-HOD	2796.329	1	2796.329	75.010	**	6.710
Faculty-HOD vs No. of research scholars registered	70.808	3	23.603	.633	Ns	2.631
Error(H-T)	12600.363	338	37.279			

Repeated Measures ANOVA for Traits Score by Gender

Source	Sum of Squares	df	Mean Square	F	Sig.	Table Value
Between Gender	1.450	1	1.450	.209	Ns	3.869
Error	2362.635	340	6.949			
Between Faculty-HOD	623.405	1	623.405	48.806	**	6.710
Faculty-HOD vs Gender	.269	1	.269	.021	Ns	3.869
Error(H-T)	4342.826	340	12.773			

Repeated Measures ANOVA for Traits Score by Medium Of Instruction

Source	Sum of Squares	df	Mean Square	F	Sig.	Table value
Between MOI[$]	2.490	1	2.490	.358	Ns	3.869
Error	2361.596	340	6.946			
Between HOD-Teachers	623.405	1	623.405	48.846	**	6.710
HOD-Teachers vs MOI[$]	3.805	1	3.805	.298	Ns	3.869
Error(H-T)	4339.290	340	12.763			

$- Medium Of Instruction

Repeated Measures ANOVA for Traits Score by Educational Qualification

Source	Sum of Squares	df	Mean Square	F	Sig.	Table Value
Between Educational Qualification	104.738	2	52.369	7.858	**	4.668
Error	2259.348	339	6.665			
Between Faculty-HOD	623.405	1	623.405	48.841	**	6.710
Faculty-HOD vs Educational Qualification	16.099	2	8.050	.631	Ns	3.022
Error(H-T)	4326.996	339	12.764			

Repeated Measures ANOVA for Traits Score by Additional Qualification

Source	Sum of Squares	df	Mean Square	F	Sig.	Table Value
Between Additional Qualification	5.465	3	1.822	.261	Ns	2.631
Error	2358.620	338	6.978			
Between Faculty-HOD	623.405	1	623.405	48.935	**	6.710
Faculty-HOD vs Additional Qualification	37.124	3	12.375	.971	Ns	2.631
Error(H-T)	4305.971	338	12.740			

Repeated Measures ANOVA for Traits Score by Nature of employment

Source	Sum of Squares	df	Mean Square	F	Sig.	Table value
Between Nature of employment	13.051	1	13.051	1.887	Ns	3.869
Error	2351.035	340	6.915			
Between Faculty-HOD	623.405	1	623.405	48.818	**	6.710
Faculty-HOD vs Age	1.301	1	1.301	.102	Ns	3.869
Error(H-T)	4341.794	340	12.770			

Repeated Measures ANOVA for Traits Score by Designation

Source	Sum of Squares	df	Mean Square	F	Sig.	Table value
Between Designation	5.415	1	5.415	.781	Ns	3.869
Error	2358.671	340	6.937			
Between Faculty-HOD	623.405	1	623.405	48.805	**	6.710
Faculty-HOD vs Designation	.161	1	.161	.013	Ns	3.869
Error(H-T)	4342.934	340	12.773			

Repeated Measures ANOVA for Traits Score by Teaching Experience

Source	Sum of Squares	df	Mean Square	F	Sig.	Table value
Between Teaching Experience	74.803	3	24.934	3.681	*	2.631
Error	2289.282	338	6.773			
Between Faculty-HOD	623.405	1	623.405	48.679	**	6.710
Faculty-HOD vs Teaching Experience	14.521	3	4.840	.378	Ns	2.631
Error(H-T)	4328.574	338	12.806			

Repeated Measures ANOVA for Traits Score by Industrial Experience

Source	Sum of Squares	df	Mean Square	F	Sig.	Table value
Between Industrial Experience	25.553	3	8.518	1.231	Ns	2.631
Error	2338.533	338	6.919			
Between Faculty-HOD	623.405	1	623.405	48.898	**	6.710
Faculty-HOD vs Industrial Experience	33.940	3	11.313	.887	Ns	2.631
Error(H-T)	4309.155	338	12.749			

Repeated Measures ANOVA for Traits Score by No. of research scholars registered

Source	Sum of Squares	df	Mean Square	F	Sig.	Table value
Between No. of research scholars registered	86.049	3	28.683	4.256	**	3.840
Error	2278.037	338	6.740			
Between Faculty-HOD	623.405	1	623.405	48.832	**	6.710
Faculty-HOD vs No. of research scholars registered	28.076	3	9.359	.733	Ns	2.631
Error(H-T)	4315.019	338	12.766			

Repeated Measures ANOVA for Self-Concept Score by Gender

Source	Sum of Squares	df	Mean Square	F	Sig.	Table value
Between Gender	13.663	1	13.663	1.257	Ns	
Error	3694.588	340	10.866			
Between Faculty-HOD	2049.497	1	2049.497	89.861	**	
Faculty-HOD vs Gender	4.956	1	4.956	.217	Ns	
Error(H-T)	7754.547	340	22.807			

Repeated Measures ANOVA for Self-Concept Score by Medium Of Instruction

Source	Sum of Squares	df	Mean Square	F	Sig.	Table value
Between MOI[$]	6.400	1	6.400	.588	Ns	3.869
Error	3701.852	340	10.888			
Between HOD-Teachers	2049.497	1	2049.497	89.943	**	6.710
HOD-Teachers vs MOI[$]	12.094	1	12.094	.531	Ns	3.869
Error(H-T)	7747.408	340	22.786			

$- Medium Of Instruction

Repeated Measures ANOVA for Self-Concept Score by Educational Qualification

Source	Sum of Squares	df	Mean Square	F	Sig.	Table value
Between Educational Qualification	82.836	2	41.418	3.873	*	
Error	3625.415	339	10.694			
Between Faculty-HOD	2049.497	1	2049.497	90.076	**	
Faculty-HOD vs Educational Qualification	46.273	2	23.136	1.017	Ns	
Error(H-T)	7713.230	339	22.753			

Repeated Measures ANOVA for Self-Concept Score by Additional Qualification

Source	Sum of Squares	df	Mean Square	F	Sig.	Table value
Between Additional Qualification	53.252	3	17.751	1.642	Ns	2.631
Error	3654.999	338	10.814			
Between Faculty-HOD	2049.497	1	2049.497	90.039	**	6.710
Faculty-HOD vs Additional Qualification	65.836	3	21.945	.964	Ns	2.631
Error(H-T)	7693.667	338	22.762			

Repeated Measures ANOVA for Self-Concept Score by Nature of employment

Source	Sum of Squares	df	Mean Square	F	Sig.	Table value
Between Nature of employment	19.961	1	19.961	1.840	Ns	
Error	3688.291	340	10.848			
Between Faculty-HOD	2049.497	1	2049.497	89.805	**	
Faculty-HOD vs Nature of employment	.144	1	.144	.006	Ns	
Error(H-T)	7759.359	340	22.822			

Repeated Measures ANOVA for Self-Concept Score by Designation

Source	Sum of Squares	df	Mean Square	F	Sig.	Table value
Between Designation	.141	1	.141	.013	Ns	
Error	3708.110	340	10.906			
Between Faculty-HOD	2049.497	1	2049.497	89.907	**	
Faculty-HOD vs Designation	8.949	1	8.949	.393	Ns	
Error(H-T)	7750.554	340	22.796			

Repeated Measures ANOVA for Self-Concept Score by Teaching Experience

Source	Sum of Squares	df	Mean Square	F	Sig.	Table value
Between Teaching Experience	47.338	3	15.779	1.457	Ns	2.631
Error	3660.914	338	10.831			
Between Faculty-HOD	2049.497	1	2049.497	89.546	**	6.710
Faculty-HOD vs Teaching Experience	23.521	3	7.840	.343	Ns	2.631
Error(H-T)	7735.982	338	22.888			

Repeated Measures ANOVA for Knowledge Score by Industrial Experience

Source	Sum of Squares	df	Mean Square	F	Sig.	Table value
Between Industrial Experience	38.634	3	12.878	1.186	Ns	2.631
Error	3669.617	338	10.857			
Between Faculty-HOD	2049.497	1	2049.497	90.591	**	6.710
Faculty-HOD vs Industrial Experience	112.724	3	37.575	1.661	Ns	2.631
Error(H-T)	7646.779	338	22.624			

Repeated Measures ANOVA for Self-Concept Score by No. of research scholars registered

Source	Sum of Squares	df	Mean Square	F	Sig.	Table value
Between No. of research scholars registered	28.015	3	9.338	.858	Ns	2.631
Error	3680.236	338	10.888			
Between Faculty-HOD	2049.497	1	2049.497	89.738	**	6.710
Faculty-HOD vs No. of research scholars registered	40.058	3	13.353	.585	Ns	2.631
Error(H-T)	7719.445	338	22.839			

Publications

Self-assessment of the Expected Competencies of Commerce Faculty in Arts and Science College in Coimbatore

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Abstract

Past research has shown that identifying the fundamental competencies required by an individual for a particular job is of greater importance than test scores or traditional intelligence. This paper focuses on the important competencies and level of competencies of faculty in arts and science colleges through self-assessment. This helps higher education institutions hire and develop its faculty to attain individual goals while keeping in line with the institution's objectives, thus improving efficiency and achieving higher productivity.

Keywords: *Competency, Faculty, Self-assessment, Teaching Proficiency, educational institution*

1. Introduction

In recent times, organisations are focusing on competencies and performance management of human assets in their organisation. This brings about a better understanding of the organisation's human resource needs, the skill and ability needed for the job, and also helps to understand the training requirements. In 1973 David C. McClelland published a paper, Testing for competency rather than for "intelligence", which brought about the competency movement that helped organisations to hire based on competencies rather than test scores or traditional intelligence. Job performance increases when the individual possesses the key competencies required for the specific job. [1]

Competency is the skill and ability to do something successfully and efficiently. Competency includes knowledge, skill, motives, self-concept, values, traits, etc. of which knowledge and skill are considered as the ones that can be easily acquired and developed. Knowledge is the information the person has on a specific content area. Skill is the ability

to perform a certain physical or mental task. Competency can be better explained by comparing it to an iceberg, where only one-ninth of the volume of the iceberg is seen above the water. Similarly, knowledge and skill are the visible competencies and the other competencies like motives, traits, self-concept, organization fit etc. are harder to change and are considered hidden.

Higher education institutions also need to emphasize on first identifying the competencies required by the faculty. This would help the institution hire faculty that are a better fit for the institution and thereby improve the efficiency and effectiveness of the faculty. Faculty are responsible for moulding the youth of India, hence they have to be motivated professionally to commit to the all-round development of the students and providing excellence in education.

A study by Tripathi P, Ranjan J, Pandeya T. , (2010) brings out that while most business organisations have assessed the competencies required and have brought out a model to define the required competencies for the effective functioning of the organization little has been done in the field of Academic Institutions. Academic Institutions also need a comprehensive system for competency based management (CBM) to meet the requirements of the fast-changing educational environment. Role of the faculty members are changing and the model will help in recruitment, career planning and faculty training programmes to help bridge the gap between current competency and required competency.[2]

A study on the changing role of teachers by Irameet Kaur, Dr Charu Shri. (2015) analyses what are the competencies that a teacher should possess from the viewpoint of students and institutions. The data was collected from 300 under-graduate students of engineering, commerce, law, management, and art in Delhi NCR. The recruitment academic performance indicators of UGC was used to identify the competencies required from the institution's point of view. The students expect the teacher to be effective in imparting knowledge as well as a person who is approachable and friendly. The institution expects more as they focus on teaching effectiveness, administrative duties, research, and publication. Thus, the superior performance of the teacher depends on the high level of knowledge, skill and attitude competencies of the teacher.[3]

While competency is made up of three main components: Knowledge, skill and attributes; this study only deals with the competencies of knowledge and skill. Knowledge and skill are easy to acquire and also change in an individual.

2. Statement Of The Problem

Extensive studies have been carried out in the field of competency mapping in most organisations but very little in the education sector. The present study would bring out the competency of faculty in the department of commerce in self-finance Arts and Science colleges in Coimbatore. Coimbatore has gained prominence in the education sector.

2.1 Objectives of the study

1. To study the socio-economic and job-related profile of the target faculty
2. To analyse the competencies expected for the faculty.
3. To examine the level of Knowledge and Skill competency of the faculty through self-assessment

3. Methodology

Using simple random sampling technique, 60 faculty working in the department of commerce in Arts and Science colleges in Coimbatore had been selected as respondents and the primary data had been collected from the respondents using a structured questionnaire. Percentage analysis has been used to examine the primary data. Secondary data for the study has been collected from various publications in journals, websites and books.

4. Analyses And Interpretation

4.1 Personal Profile

Table 1 shows the classification of the respondents based on their gender, age, income, qualification, designation, work experience, and the number of teaching hours of the faculty. The interpretations have been presented below.

Table 1: Personal Profile of Teaching Faculty

Particulars	Classification	No. of respondents	Percent
Gender	Male	15	25.0
	Female	45	75.0
Age	25-30 Years	24	40.0
	31-40 Years	30	50.0
	41-50 Years	6	10.0
Monthly income (Personal)	Up to 20,000	22	36.6
	20,001-30,000	31	51.6
	30,001-40,000	2	3.3
	Above 40,000	5	8.3
Qualification	Post-Graduation	3	5.0
	M.Phil.	33	55.0
	Ph.D.	24	40.0
Designation	Assistant Professor	59	98.3
	Associate Professor	1	1.6
Teaching Experience	1-5 Years	25	41.6
	6-10 Years	25	41.6
	11-15 Years	6	10.0
	> 15 Years	4	6.6
Number of teaching hours/week	10-15 hrs	1	1.6
	16-20 hrs	57	95.0
	21 hrs & above	2	3.3
Total	**60**		

(Source: Primary Data)

4.1.1 Gender: 25 per cent of the respondents are males and 75 per cent are female. There is a larger number of female faculty in Arts and Science Colleges of Coimbatore.

4.1.2 Age: It is noted from the above table that 40 per cent of the faculty are less than 30 years of age, 30 per cent are between the age group of 30 to 40 years, and 10 per cent are between the age group of 41 to 50 years.

4.1.3 Monthly income (personal): The personal monthly income of 36.6 per cent of the respondents are less than Rs.20,000 while 51.6 per cent of them earn in the range of Rs.20,000-Rs.30,000. 3.3 per cent of respondents earn in the range of Rs.30,000-Rs.40,000 and 8.3 per cent earn above Rs.40,000. 88.2 per cent of the respondents earn a monthly salary of less than Rs.30,000. The reason for the low level of remuneration maybe because the respondents are from self-finance department and are management paid faculty.

4.1.4 Highest Educational Qualification: Only 5 per cent of the faculty are postgraduates, 55 per cent are M.Phil. and 40 per cent are with Ph.D. Most of the faculty are M.Phil. and Ph.D. qualified faculty.

4.1.5 Designation: 98.3 per cent of the faculty are assistant professors and 1.6 per cent are associate professors. Most of the faculty are less than 40 years old, so the majority of the respondents are Assistant Professors.

4.1.6 Teaching Experience: 41.6 per cent of the faculty had teaching experience in the range of 1 to 5 years. 41.6 per cent of the faculty had teaching experience of 6 to 10 years. 10 per cent was in the range of 11 to 15 years and 6.6 per cent had a teaching experience above 15 years. Most of the faculty have teaching experience of less than 10 years and this corresponds with the fact that most of the faculty are less than 40 years old.

4.1.7 Number of teaching hours per week: The number of teaching hours for 1.6 per cent of the faculty was between 10 to 15 hours per week and a majority of the faculty, that is 95.0 per cent worked 16 to 20 hours per week. Only 3.3 per cent had a higher workload of 21 hours and above per week.

4.2 Competencies Of Faculty

The faculty ranked the important competencies essential for the faculty in the Department of Commerce in the order of importance. The most important competency was ranked one and the least important was given the rank of 10.

Table 2: Ranking of Competencies of faculty

Competency	Mean Rank	Percentage	Rank
Subject Knowledge	2.48	63.3	1
Teaching Ability	2.48	35.0	2
Communication Skill	3.11	33.3	3
Flexibility	7.01	25.0	8
Time Management	5.20	23.3	4
Intellectual Curiosity	6.48	21.6	6
Interpersonal Relationship	6.80	13.3	7
Sincere and Hardworking	5.86	15.0	5
Personal involvement in research/ Research skill	8.03	31.6	9
Awareness of industrial requirement	8.18	36.6	10

(Source: Primary Data)

Kendall's Coefficient of Concordance

Kendall's W	0.522

Table 2 indicates that both Subject knowledge and Teaching ability have the same mean rank but subject knowledge has been ranked one by 63.3 per cent of the respondents with a mean ranking of (2.48). Teaching ability has been ranked second by 35 per cent of the respondents with a mean ranking of (2.48) and Communication skill third by 33.33 per cent of the respondents with a mean ranking of (3.11). Personal involvement in research/research skill and awareness about industrial requirement have the least ranking of nine and ten respectively.

The Kendall's W value of 0.522 indicates that there is a moderate level of similarity in the ranking order of the competencies made by the respondent.

4.3 Competency – Knowledge And Skill - Score

The competency score is the total of the self-evaluation made by the faculty on both competencies, knowledge and skill. Confidentiality was maintained for the data collected from the faculty through the questionnaires.

4.3.1 Knowledge Score

The knowledge score is a total of the self-evaluation made by the faculty on 6 items on a 5-point rating scale. The rating assigned is 5-excellent, 4-very good, 3-good, 2-fair, 1-poor for each of the items. Knowledge scores were found out by adding the ratings given for each of the 6 items.

Table 3: Knowledge Score of the faculty

S. No	Competency Level	Number	Percentage
1	High (30 - 24)	45	33.33
2	Medium (26 – 24)	25	41.66
3	Low (below 24)	15	25.00
	Total	60	100

(Source: Primary Data)

From table 3 it can be inferred that 33.33 per cent of the faculty have a high Knowledge competency with a self-evaluation total score of above 24. 41.66 per cent of the faculty have a moderate knowledge competency with the total score between (24 – 26). 15 per cent of the faculty have a low knowledge competency with a total score below 24. The mean knowledge score was 4.20.

4.3.2 Skill Score

The skill score is a total of the self-evaluation made by the faculty on 8 items on a 5-point rating scale. The rating assigned is 5-excellent, 4-very good, 3-good, 2-fair, 1-poor for each of the items. Skill scores were found out by adding the ratings given for each of the 8 items.

Table 4: Skill Score of the faculty

S. No	Competency Level	Number	Percentage
1	High (40 - 36)	33	55.00
2	Medium (35 – 32)	18	30.00
3	Low (below 32)	9	15.00
	Total	60	100

(Source: Primary Data)

From table 4 it can be inferred that 55 per cent of the faculty have a high Skill competency with a self-evaluation total score of above 36. 18 per cent of the faculty have a moderate skill competency with the total score between (35 – 32). 9 per cent of the faculty have a low skill competency with a total score below 32. The mean skill score was 4.42.

5. Conclusion

1. The study showed that the majority, that is 75 per cent of the faculty in self-finance college's, commerce department were females and most of the faculty were less than 40 years, with M.Phil. or Ph.D. 88.2 per cent earned an income less than rupees 30,000.
2. Subject knowledge, teaching ability and communication skill are the most important competencies required for faculty
3. Self-evaluation made by the faculty showed that the faculties possessed high level of Knowledge and Skill competencies.

6. References

6.1 Journal Articles

[1] *Mc Clelland. (**1973**). "Testing for competence rather than for 'intelligence'." American Psychologist, 28, 1-14*

[2] *Tripathi P, Ranjan J, Pandeya T. (**2010**). "PAKS: A Competency based model for an Academic Institutions". International Journal of Innovation, Management and Technology, Vol. 1, No. 2, pp. 214-219. June 2010 ISSN: 2010-0248*

[3] *Irameet Kaur, Dr. Charu Shri. (**2015**). Effective teaching competencies - a compilation of changing expectations from students and institutions. Journal of Contemporary Research in Management Vol. 10; No. 1pp.57-71 Jan - March 2015*

COMPETENCY ASSESSMENT OF FACULTY IN HIGHER EDUCATIONAL INSTITUTIONS: STUDENTS PERSPECTIVE

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Abstract

Faculty evaluation has become an annual occurrence in educational institutions. A fair and unbiased evaluation is beneficial to the faculty and the institution. This study compares self-evaluation by faculty with their student's evaluation. Introspection by the faculty through self-evaluation helps to understand one's competency level and highlights the accomplishment. Student's feedback help faculty understand how they are perceived by their students.

Keywords: *faculty, faculty evaluation, student feedback, competency, higher education*

1. Introduction

India has over 45,000 colleges offering diverse courses to students who are the future of our country. The variety of courses offered in higher educational institutions has multiplied over the past few decades leading to improved course content while keeping in mind the requirements of the industries and the need of the hour. With changes in the education sector, educational institutions are encouraging faculty to use new and innovative teaching methodology to improve faculty-student interaction and knowledge enhancement of the students.

Every sector needs individuals with specific knowledge and skill-sets to perform the tasks successfully and efficiently. This principle applies to the education sector too. Earlier, the job description for faculty was only to impart knowledge but nowadays, faculty participate in research activities, mentoring of students, participating in conferences and seminars, and much more. Hence, the job description of faculty has widened and the competency requirement has evolved. Competency can be broadly categorised into knowledge, skill, motive, traits, and self-concept. Knowledge and skill are that which a person acquires easily through training and education whereas motive, traits, and self-concept are that which form the personality of the individual. They are more difficult to change and very often not seen.

Colleges have a traditional evaluation method for faculty, where the department head would compile an annual faculty evaluation report. This in the current scenario may be considered biased and incomplete.

Most colleges have faculty advisors for all student activities and events. Hence, there is also a closer interaction between the faculty and students. Lately, there has been a shift. Colleges are gathering feedback from students on faculty members. Student evaluations are a means of assessing faculty performance in the classroom and their interaction with the students (Lin. 2007). The study "Burnout Among Teachers *Students' and Teachers' Perceptions Compared"* showed that the perspective of the students was different from that of the self-assessment made by the faculty with regard to their competency level. Since there is greater interaction between students and faculty, students are able to detect "burnout" in the faculty. This helps in the early detection of deterioration of a faculty's psychological and social wellbeing. Timely intervention will be highly beneficial to both faculty and students. But this also only gives the perspective of the students. It is better to have more than one perspective, taken into account.

2. Statement of Problem

Coimbatore has gained prominence in the education sector with a large number of Arts and Science colleges in the city. The present study would bring out the competency level of faculty through self-evaluation and compares it with that made by the students. The respondents are from self-financed Arts and Science colleges in Coimbatore.

2.1 Objectives of the study

1. To study the socio-economic and job-related profile of the faculty.
2. To analyse the competencies required for faculty from the student respondents.
3. To compare the self-assessment and the assessment made by students.

3. Methodology

Using simple random sampling technique, 45 faculties from self-financed Arts and Science colleges in Coimbatore had been selected. Using simple random sampling technique, 4 students corresponding to each faculty respondent were also selected and the primary data had been collected from both groups of respondents using structured

questionnaires. Percentage analysis has been used to examine the primary data. Secondary data for the study has been collected from various publications in journals, websites, and books.

4. Analyses And Interpretation

4.1 Personal Profile

Table 1 shows the grouping of the faculty respondents based on their gender, age, marital status, type of family, monthly income(personal), educational qualification, designation, teaching experience, and the number of teaching hours per week of the faculty.

Table 1: Personal Profile of Teaching Faculty

Particulars	Classification	No. of respondents	Percentage
Gender	Male	15	33.33
	Female	30	66.66
Age	25- 30 Years	11	24.44
	31- 40 Years	27	60.00
	41- 50 Years	7	15.55
Marital status	Married	38	84.44
	Unmarried	7	15.55
Type of family	Joint family	16	35.55
	Nuclear	29	64.44
Monthly income (Personal)	Up to 20,000	10	22.22
	20,001-30,000	25	55.55
	30,001-40,000	6	13.33
	Above 40,000	4	8.88
Educational Qualification	Post-Graduation	5	11.11
	M.Phil.	19	42.22
	Ph.D.	21	46.66
Designation	Assistant Professor	44	97.77
	Associate Professor	1	2.22
Teaching Experience	1-5 Years	11	24.44
	6-10 Years	17	37.77
	11-15 Years	14	31.11
	> 15 Years	3	6.66
Number of teaching hours/week	15-20 hrs	41	91.11
	21 hrs & above	4	8.88
Total	**45**		

(Source: Primary Data)

The interpretations have been presented below.

4.1.1 Gender: Female faculty constitute 66.66 per cent whereas male faculty constitute 33.33 per cent.

4.1.2 Age: The majority of the faculty, 60 per cent are between the age group of 31- 40 years, 24.44 are between 25-30 years and only 15.55 per cent are between the age group of 41-50 years.

4.1.3 Marital status: 84.44 per cent of the faculty are married and 15.55 per cent are unmarried.

4.1.4 Type of family: 35.5 per cent of the faculty live in joint families, whereas, majority of the faculty, that is 64.44 percent live in nuclear families.

4.1.5 Monthly income (Personal): The personal income of 22.22 per cent of the faculty is below 20,000 and the majority of them earn between 20,001 to 30,000. 13.33 percent earn between 30,001 to 40,000 and only 8.88 per cent earn above 40,000. It can be noted that the salary structure of faculty in self-financed colleges is low.

4.1.6 Highest Educational Qualification: Most of the faculty, 46.66 per cent of the faculty have completed their Ph.D. and 42.22 per cent have M.Phil. degree. Only 11.11 per cent of the faculty have only a postgraduate degree. It can be noted that most of the faculty members are well qualified.

4.1.7 Designation: 97.77 per cent of the faculty are assistant professors and only 2.22 per cent are associate professors. This may be due to the faculty being from self-financed colleges and most of the faculty are less than 40 years of age.

4.1.8 Teaching Experience: 24.11 per cent of the faculty had less than 5 years of teaching experience, 37.77 percent between 6 to 10 years, 31.11 per cent between 11 to 15 years, and only 6.66 per cent had more than 15 years of teaching experience.

4.1.9 Number of teaching hours per week: 91.11 per cent of the faculty teach for 15 to 20 hours a week. Only 8.88 per cent of the faculty had a higher workload of more than 20 hours a week.

4.2 Competencies Of Faculty

The students of the faculty respondents ranked the important competencies required for the faculty in the order of importance. 1 to 10 ranking was given, with 1 for the most important and 10 for the least important.

Table 2: Ranking of important competencies required for faculty by student respondents

Competency	Mean Rank	Percentage	Rank
Core subject knowledge	2.98	46.66	1
Teaching skill	3.56	33.33	3
Good communication Skill	3.28	33.33	2
Understanding	4.58	33.33	4
Impartial	6.81	6.66	7
Role model	7.21	17.77	9
Helpfulness towards students	5.41	26.66	5
Individual Personality	7.03	15.55	8
Time-management	6.68	31.11	6
Flexibility	7.50	33.33	10

Kendall's Coefficient of Concordance

Kendall's W	0.339

Table 2 indicates that core subject knowledge was ranked the most important competency by 46.66 percent of the students and had the lowest mean rank of (2.98), followed by good communication skill and teaching skill with a mean rank of 3.28 and 3.56 respectively by (33.33) per cent of the students. Flexibility was ranked tenth by 33.33 percent of the students with a mean rank of (7.50).

Kendall's W value of 0.339 indicates that there is a fair agreement in the ranking order of the competencies made by the student respondent.

4.3 Comparison Of Competency Scores

The competency scores were assessed in five different areas of Knowledge, skill, motive, traits, and self-concept on 5 point rating scale. Data for all five competencies were collected from faculty and students through questionnaires. Confidentiality of data was maintained for the data collected for both groups of respondents.

Table 3: Comparison of competency rating between faculty and students

S. No.	Competency	Faculty	Mean	Student	Mean
1	Knowledge rating	16.88	4.22	14.95	3.73
2	Skill rating	30.06	4.38	25.51	3.64
3	Motive rating	27.31	4.55	23.65	3.94
4	Traits rating	27.31	4.55	24.55	4.09
5	Self-concept rating	22.48	4.49	19.22	3.84

From table 3 it is seen that the knowledge rating for the faculty on self-assessment is 16.88 and when evaluated by the students of the same faculty, the knowledge rating is 14.95. The self-assessment skill rating of the faculty is 30.06 and the student evaluation is 25.51. The self-assessment motive rating of the faculty is 27.31 and when assessed by students is 23.65. The self-assessment traits rating of the faculty is 27.31 and when assessed by students is 24.55. The self-assessment self-concept rating of the faculty is 22.48 and when assessed by students is 19.22.

It can be inferred that the student assessment of the faculty is lower than the self-assessment made by the faculty and a greater difference of 0 .7 is seen in the skill competency. The least difference of 0.46 is for the traits competency.

5. Conclusion

1. The studies showed that the majority of the faculty, that is 66.66 per cent were females and that most of the faculty were married living in a nuclear family, and were below the age of 40 years. Most of the faculty were assistant professors with

teaching experience of less than 10 years, working 15 to 20 hours a week and had a personal income of less than 30,000 per month. The faculty were well qualified, with 46.66 per cent had completed Ph.D. and 42.22 had completed M.Phil. degree.

2. The student's assessment shows that the most important competency needed for faculty was subject knowledge, the second was good communication skills and the third was teaching skills.
3. The student's assessment of the faculty competency is lower than the self-assessment made by the faculty.

6. Limitations

The sample was taken from the self-financed colleges of Coimbatore city. This may not represent the entire population.

BIBLIOGRAPHY

1. Evers WJG, Tomic W, Brouwers A. Burnout among Teachers: Students' and Teachers' Perceptions Compared. *School Psychology International*. 2004;25(2):131-148. doi:10.1177/0143034304043670

2. Lin, Tin-Chun, Economic Behavior of Student Evaluations of Teaching: A Theoretical and Empirical Analysis (March 18, 2007). Available at SSRN: https://ssrn.com/abstract=978518 or http://dx.doi.org/10.2139/ssrn.978518

3. Sanghi, S. (2007). *The handbook of competency mapping: Understanding, designing and implementing competency models in organizations*. SAGE Publications India Pvt Ltd, https://www.doi.org/10.4135/9788132108481