

CHAPTER III

RESULTS AND INTERPRETATIONS

3.1 INTRODUCTION

In the previous chapter, research design of the study was presented along with research methodology in detail. This chapter presents statistics and interpretation of data collected from psychology professionals for the purpose of the study. Analysis and results are presented quantitatively and qualitatively followed by summery paraphrasing the results. The primary data were collected through questionnaires and interviews to understand the perspectives of psychology professionals regarding professional development of psychology, the Secondary data were collected from the official websites of state and central universities and other educational institutions.

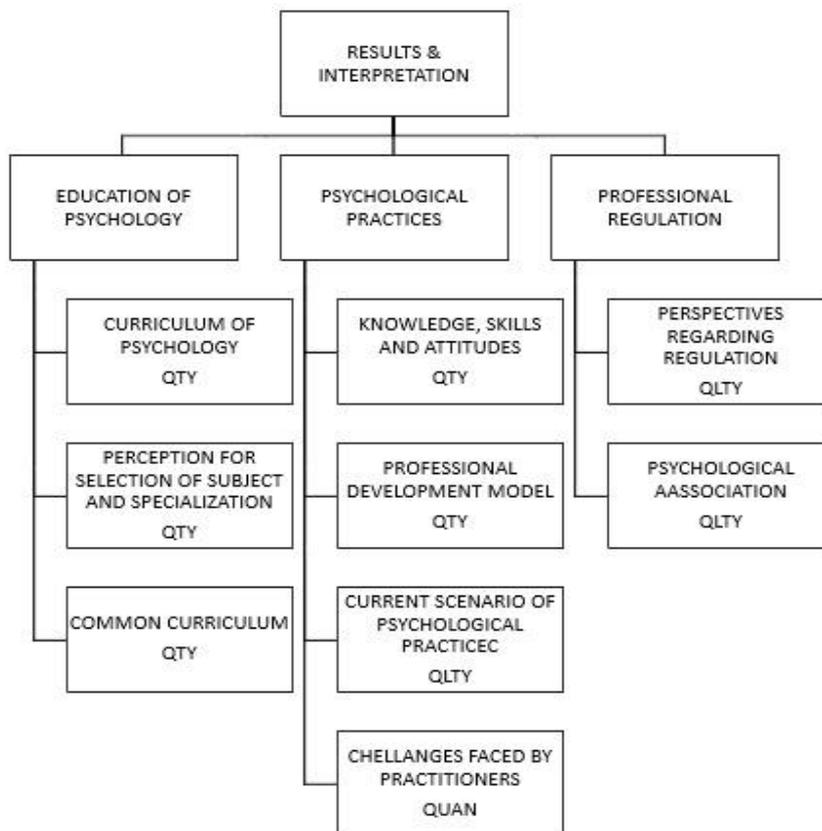


Figure – 3.1 – Scheme of Analysis

A) Descriptive Analysis

Quantitative methods of data analysis were used in the study and presented in following sections.

3.2.1 SECTION I

This section contains practitioners' perspectives for different aspects of Postgraduation in Psychology such as, their perspectives on

- ✓ Methods of selecting students in Postgraduation,
- ✓ Methods of allotment of specialization in Postgraduation.
- ✓ Importance of theoretical knowledge and practical knowledge in Postgraduation curriculum and
- ✓ Practitioners' opinion about uniform curriculum in Postgraduation across country.

Table 3.1 – Methods for Selecting Students at Postgraduation Level

Categories	Frequency	%
Merit +Entrance Test + Interview	139	41.7
Merit + Entrance Test	87	26.1
Merit + Interview	107	32.1
Total	333	100.0

Table 3.1 represents practitioners' perspectives on the methods for selecting students in Postgraduation. In India, universities give admission to students on the basis of merit, entrance test and interview. When asked about their preferences for the methods, 41.7 % of practitioners responded that selection need to be done on the basis of all methods, merit, entrance test and interview, 32.1 % of respondents said that selection need to be done on the basis of merit and interview and 26.1 % of respondents preferred merit and entrance test as appropriate for the selection of students in Postgraduation.

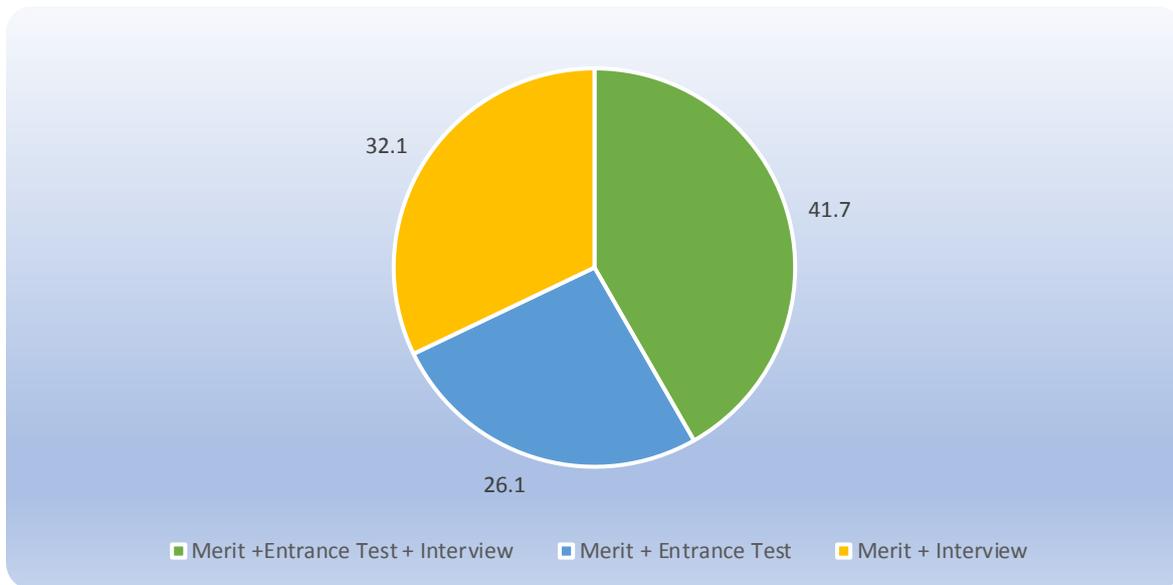


Figure 3.2 – Pie Chart of Preferred Methods of Selecting Students for Postgraduation.

Table 3.8 - Selection of Specialization at Postgraduation Level

Categories	Frequency	%
Merit +Entrance Test + Interview	125	37.5
Merit + Entrance Test	89	26.7
Merit + Interview	119	35.7
Total	333	100.0

Table 3.8 represents practitioners' perspectives on the methods for giving specializations to students in Postgraduation. Universities and colleges in India, offers specializations in Postgraduation of psychology such as Clinical Psychology, Counseling Psychology, Developmental Psychology, Educational Psychology, Health Psychology, Social Psychology and Industrial Psychology. In most universities, it was observed that students' marks in graduation is considered primarily for an allotment of specialization in Postgraduation. When asked about the preference from practitioners' perspectives, 37.5 % of respondents suggested that all methods, merit, entrance test and interview need to be considered for the specialization, where 35.7 % of respondents perceived that merit and interview need to be considered for the allotment of specialization.

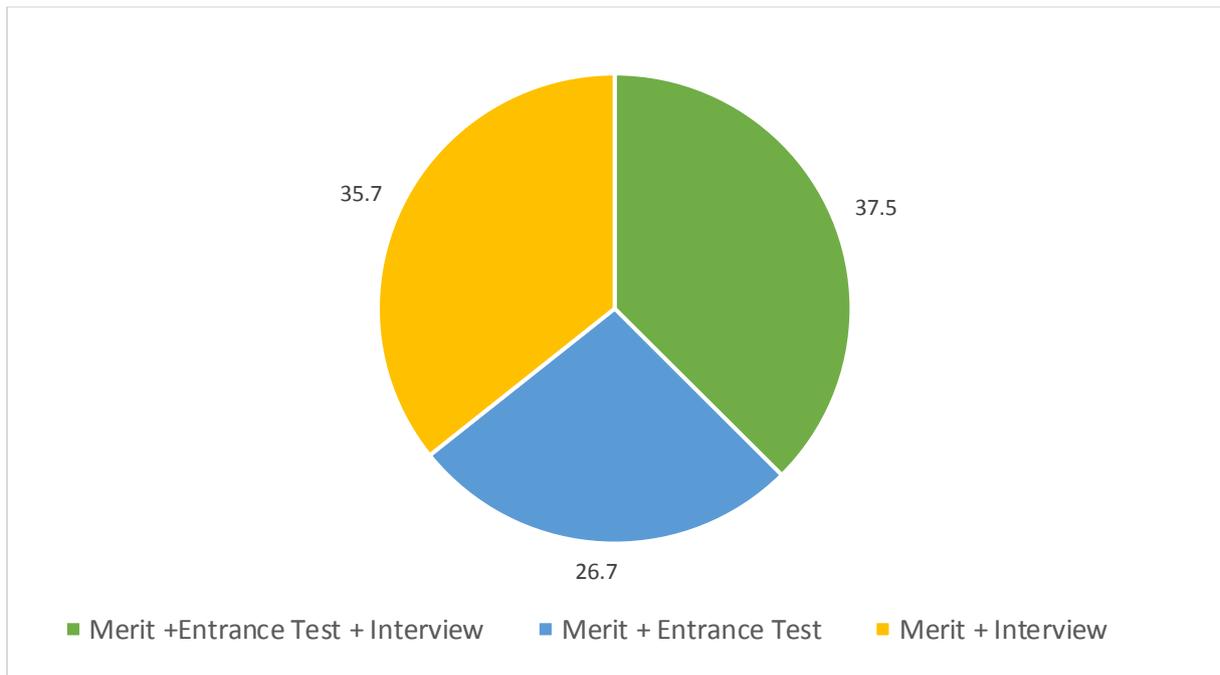


Figure 3.3 – Pie Chart of Methods of Allotment of Specialization in Postgraduation.

Table 3.3 - Need of Theoretical Knowledge in Postgraduation

Categories	Frequency	%
Needed	236	70.9
Neutral	55	16.5
Not Needed	42	12.6
Total	333	100.0

Table 3.3 represents practitioners' perspectives on the importance of theoretical knowledge in the curriculum of Postgraduation in Psychology. As indicated in table 3.3, 70.9 % of practitioners perceived that theoretical knowledge is needed the most and 16.5 % of respondent stated theoretical knowledge is not needed.

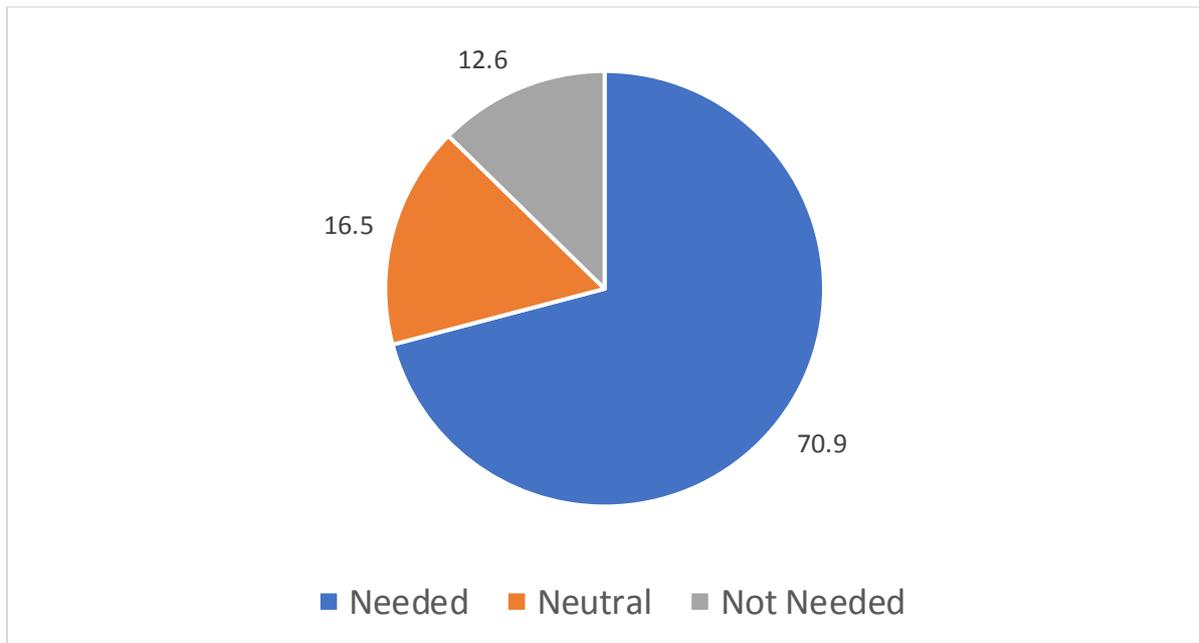


Figure 3.4 – Pie Chart of Importance of Theoretical Knowledge

Table 3.4 – Importance of Practical Learning

Categories	Frequency	%
Needed	285	85.6
Neutral	10	3.0
Not Needed	38	11.4
Total	333	100.0

Table 3.4 represents practitioners' perspectives on importance of practical knowledge in Postgraduation of Psychology. In psychology, practical exposure of counseling, therapeutic intervention, psychological assessment and research are crucial points which need to be included in the PG curriculum. As shown in table 3.10, 85.6 % of respondents said that practical exposure is need the most where 11.4 % of respondents denied the statement.

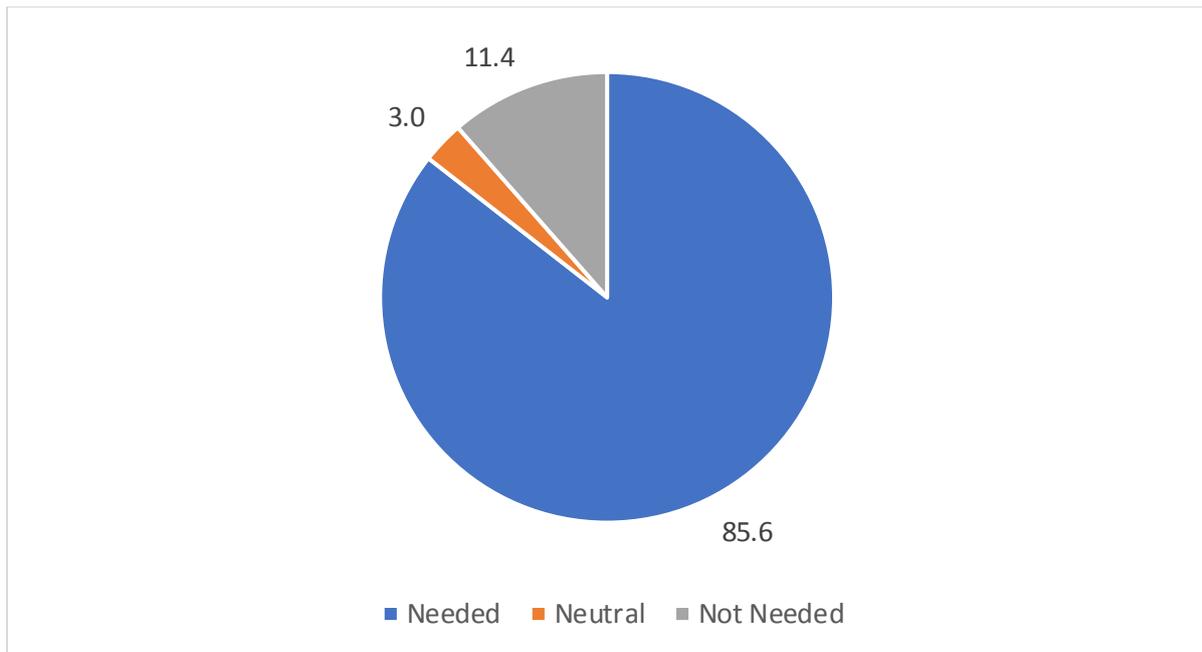


Figure 3.5 – Pie Chart of Importance of Practical Knowledge.

Table 3.5 - The Importance of Uniform Curriculum in Psychology at Post-Graduate Level.

Categories	Frequency	%
Needed	219	65.8
Neutral	65	19.5
Not Needed	49	14.7
Total	333	100.0

Table 3.5 represents practitioners' perspectives on the importance of uniform curriculum in Psychology at post-graduate level. When asked to practitioners about their opinion about uniformity of psychology curriculum, 65.8 % of respondents believed that uniformity in curriculum across the country is needed, whereas 14.7 % of respondents perceived that it is not needed.

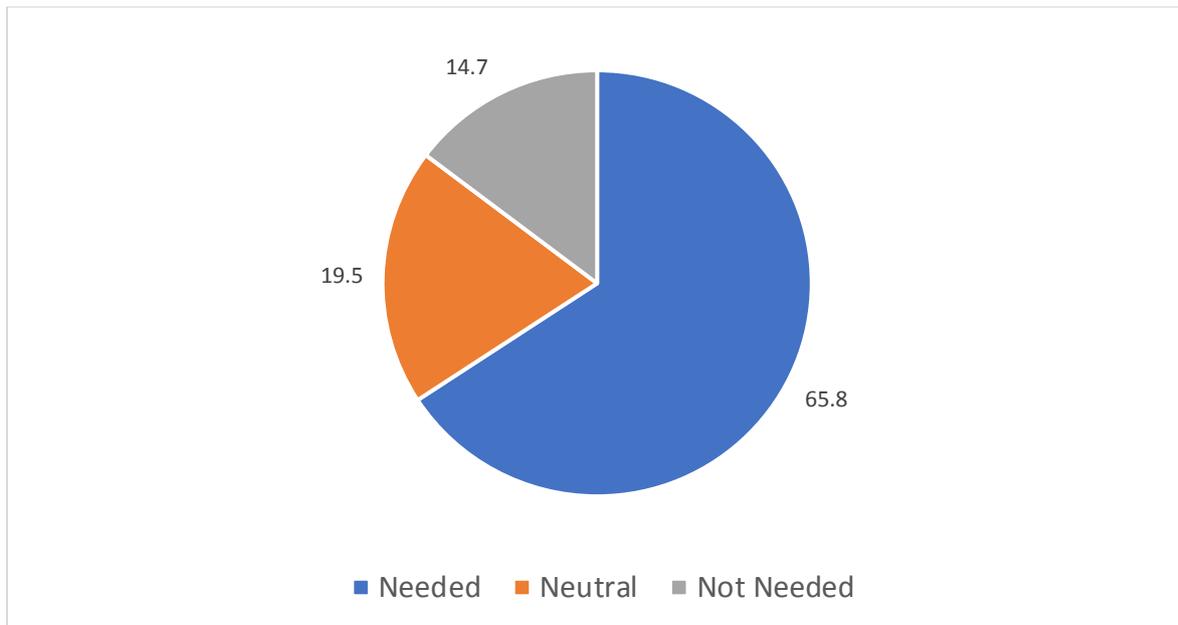


Figure 3.6- Pie Chart of Importance of Uniform Curriculum in Psychology

Table 3.6 – Intensity Indices of Perceived Issues of Psychology in India

Sr. No.	Major Issues in Psychology	N	Mean	Std. Deviation
1	Lack of regulatory body in the country for Psychology.	333	4.27	0.95
2	Lack of Support from Government and Non-Government Psychological Organizations	333	4.25	0.89
3	Lack of Awareness to Seek Mental Health Services among People in Society.	333	4.24	0.81
4	Misuse of the terms, "Psychologist" and "Counselor"	333	4.20	0.88
5	Lack of appropriate training in psychological practices.	333	4.17	0.87
6	Lack of Ethical Guidelines to Practice	333	4.10	0.90

7	Lack of Supervision and Monitoring of Psychological Services	333	4.09	0.96
8	Lack of attention to other disciplines of psychology except ‘Clinical Psychology’.	333	3.86	1.04
9	Difficulty in establishing private practice.	333	3.74	1.04
10	Exhaustion due to professional responsibilities and client care	333	2.99	1.01

Table 3.6 represents perceived issues in psychology profession by practitioners. Lack of regulatory body in the country for psychology (M = 4.27), lack of support from Government and Non-Government psychological organizations (M = 4.25), lack of awareness to seek mental health services among people (M = 4.24) and Misuse of terms “Psychologist” and “Counselor” (M = 4.20) are perceived major issues in psychology profession in India. Lack of training to deliver psychological services (M = 4.17), Lack of Ethical Guidelines to psychological practice (M = 4.10), lack of supervision and monitoring of psychological services (M = 4.09) were perceived on moderate level. Lack of attention to other disciplines of psychology except ‘Clinical Psychology’ (M = 3.86), difficulty in establishing private practices (M = 3.74) and exhaustion due to professional responsibilities and client care (M = 2.99) are least concerned issues which are prevailing in psychology profession.

3.2.1 - SECTION II

This section represents test of significance among demographic variables – Gender, Qualification, Specialization, Area of Work and Work Experience and Dimensions of Professional Development (Relationship, Assessment, Intervention, Research and Evaluation, Consultation and Education, Diversity and Technological Competence). Independent Variable T-Test and Analysis of Variance (ANOVA) were calculated to measure whether there is a significance difference among demographic variables and dimensions.

Table 3.7 - Independent Variable T Test Between Various Dimension and Gender

Dimension	Gender	N	Mean	t	Df	Sig. (2-tailed)
Relationship	Male	65	34.47 (9.98)	1.65	320	0.10
	Female	257	32.53 (8.08)			
Assessment	Male	68	20.98 (6.63)	0.74	331	0.46
	Female	265	20.41 (5.40)			
Intervention	Male	68	19.3 (5.87)	0.92	331	0.36
	Female	265	18.67 (5.76)			
Research and Evaluation	Male	68	14.64 (5.07)	-0.65	331	0.52
	Female	265	15.1 (5.30)			
Consultation and Education	Male	68	17.75 (6.36)	0.05	331	0.96
	Female	265	17.7 (6.30)			
Diversity	Male	68	36.91 (12.08)	-0.61	331	0.54
	Female	265	37.89 (11.92)			
Technological Competence	Male	68	6.29 (2.42)	-1.86	331	0.06
	Female	265	6.94 (2.60)			

Table 3.7 represents independent variable t-test between dimensions of professional development and Gender. No significant difference among the responses of male and female for professional development of psychologists were noted. Hence, it can be interpreted that both males and females had homogeneous perspectives for the betterment of psychology profession.

Table 3.8 - One Way Analysis of Variance (ANOVA) between All dimensions and Qualification.

Dimensions	Qualification	Mean	SD	df	F	Sig. (2 tailed)
Relationship	Postgraduation	32.49	8.399	(2, 330)	2.82	0.06
	M.Phil.	32.11	6.916			
	Ph.D.	35.41	9.820			
Assessment	Postgraduation	20.55	5.613	(2, 330)	0.69	0.50
	M.Phil.	19.77	5.292			
	Ph.D.	21.07	6.219			
Intervention	Postgraduation	18.42	5.710	(2, 330)	2.62	0.07
	M.Phil.	18.91	4.685			
	Ph.D.	20.37	6.673			
Research and Evaluation	Postgraduation	15.07	5.371	(2, 330)	0.42	0.66
	M.Phil.	14.40	4.337			
	Ph.D.	15.32	5.520			
Consultation and Education	Postgraduation	17.48	6.433	(2, 330)	1.52	0.22
	M.Phil.	17.30	5.361			
	Ph.D.	19.04	6.442			
Diversity	Postgraduation	37.66	12.162	(2, 330)	0.94	0.39
	M.Phil.	36.00	9.727			
	Ph.D.	39.23	12.694			
Technological Competence	Postgraduation	6.97	2.724	(2, 330)	1.52	0.22
	M.Phil.	6.36	2.201			
	Ph.D.	6.53	2.237			

Table 3.8 represents one-way analysis of variance between dimensions of professional development and qualification. There is no significant difference among the responses of practitioners having qualification, Postgraduation, M.Phil. and Ph.D. – for professional development of psychologists. Thus, the concern for regulation and continuous development of psychology professionals is same from the perspectives of all practitioners., irrespective of their qualification.

Table 3.9 - One Way Analysis of Variance (ANOVA) between All dimensions and Area of Work.

Dimension	Area of Work	Mean	SD	Df	F	Sig. (2 tailed)
Relationship	Clinical and Health	33.75	8.85	(3, 329)	1.81	0.14
	Education	32.59	7.81			
	Work and Organization	33.03	10.23			
	Counseling	30.42	6.95			
Assessment	Clinical and Health	20.84	5.59	(3, 329)	0.75	0.52
	Education	20.12	5.62			
	Work and Organization	21.16	6.23			
	Counseling	19.73	5.72			
Intervention	Clinical and Health	19.47	6.01	(3, 329)	2.03	0.11
	Education	18.39	5.48			
	Work and Organization	18.91	6.01			
	Counseling	17.20	5.09			
Research and Evaluation	Clinical and Health	15.43	5.21	(3, 329)	1.18	0.32
	Education	14.23	4.70			

	Work and Organization	14.53	5.30			
	Counseling	15.41	6.35			
	Clinical and Health	18.53	6.45			
Consultation and Education	Education	16.88	5.80	(3, 329)	1.89	0.13
	Work and Organization	17.03	5.55			
	Counseling	16.84	7.05			
	Clinical and Health	38.98	11.89			
Diversity	Education	35.76	10.51	(3, 329)	1.48	0.22
	Work and Organization	37.09	12.18			
	Counseling	37.25	14.34			
	Clinical and Health	7.15	2.61			
Technological Competence	Education	6.26	2.24	(3, 329)	2.42	0.07
	Work and Organization	6.66	2.50			
	Counseling	6.77	3.04			

Table 3.9 represents the one-way analysis between dimensions of professional development and Area of Work of practitioners. There are no significant differences among the responses of practitioners from Clinical and Health, Education, Work and Organization and Education. Hence, it can be concluded that all practitioners' opinions are homogeneous for professional development.

Table 3.10 - One Way Analysis of Variance (ANOVA) between All dimensions and Occupation.

Dimensions	Occupation	N	Mean	SD	Df	F	Sig. (2 tailed)
Relationship	Academician	88	33.49	8.01	(2, 330)	0.95	0.39
	Practitioner	184	32.38	8.19			
	Researcher	50	33.96	10.40			
Assessment	Academician	91	20.40	5.88	(2, 330)	0.26	0.77
	Practitioner	188	20.71	5.36			
	Researcher	54	20.13	6.42			
Intervention	Academician	91	19.15	6.16	(2, 330)	0.41	0.66
	Practitioner	188	18.57	5.30			
	Researcher	54	19.15	6.75			
Research and Evaluation	Academician	91	14.36	5.46	(2, 330)	1.41	0.25
	Practitioner	188	15.43	4.97			
	Researcher	54	14.67	5.81			
Consultation and Education	Academician	91	17.88	7.10	(2, 330)	0.09	0.92
	Practitioner	188	17.59	5.74			
	Researcher	54	17.89	6.88			
Diversity	Academician	91	37.26	13.34	(2, 330)	0.18	0.84
	Practitioner	188	37.68	10.60			
	Researcher	54	38.48	13.92			
Technological Competence	Academician	91	6.42	2.44	(2, 330)	1.46	0.23
	Practitioner	188	6.97	2.60			
	Researcher	54	6.93	2.75			
	Practitioner	188	36.13	4.61			
	Researcher	54	34.98	4.59			

Table 3.10 represents the one-way analysis of variance between dimensions of professional development and occupation of practitioners. There is no significant difference among the responses of practitioners from different occupations such as academics, research

and practice. It shows homogeneous way of responding from all practitioners for professional development of psychologists.

Table 3.11 - One Way Analysis of Variance (ANOVA) between All dimensions and Work Experience

Dimensions	Work Experience	N	Mean	SD	Df	F	Sig. (2 tailed)
Relationship	Less than 5 Years	59	35.03	8.72			
	6 - 10 Years	216	31.99	7.85	(2, 330)	4.07	0.02
	More Than 10 Years	47	34.57	10.48			
Assessment	Less than 5 Years	63	20.43	5.19			
	6 - 10 Years	222	20.17	5.47	(2, 330)	2.91	0.06
	More Than 10 Years	48	22.33	6.87			
Intervention	Less than 5 Years	63	18.87	5.71			
	6 - 10 Years	222	18.36	5.39	(2, 330)	3.94	0.02
	More Than 10 Years	48	20.92	7.15			
Research and Evaluation	Less than 5 Years	63	15.13	5.38			
	6 - 10 Years	222	14.60	5.08	(2, 330)	3.50	0.03
	More Than 10 Years	48	16.79	5.60			
Consultation and Education	Less than 5 Years	63	18.49	6.02			
	6 - 10 Years	222	17.14	6.18	(2, 330)	3.16	0.04
	More Than 10 Years	48	19.40	6.93			

	Less than 5 Years	63	38.59	11.23			
Diversity	6 - 10 Years	222	36.64	11.78	(2, 330)	3.46	0.03
	More Than 10 Years	48	41.44	12.98			
	Less than 5 Years	63	6.97	2.46			
Technological Competence	6 - 10 Years	222	6.63	2.56	(2, 330)	2.21	0.11
	More Than 10 Years	48	7.46	2.76			

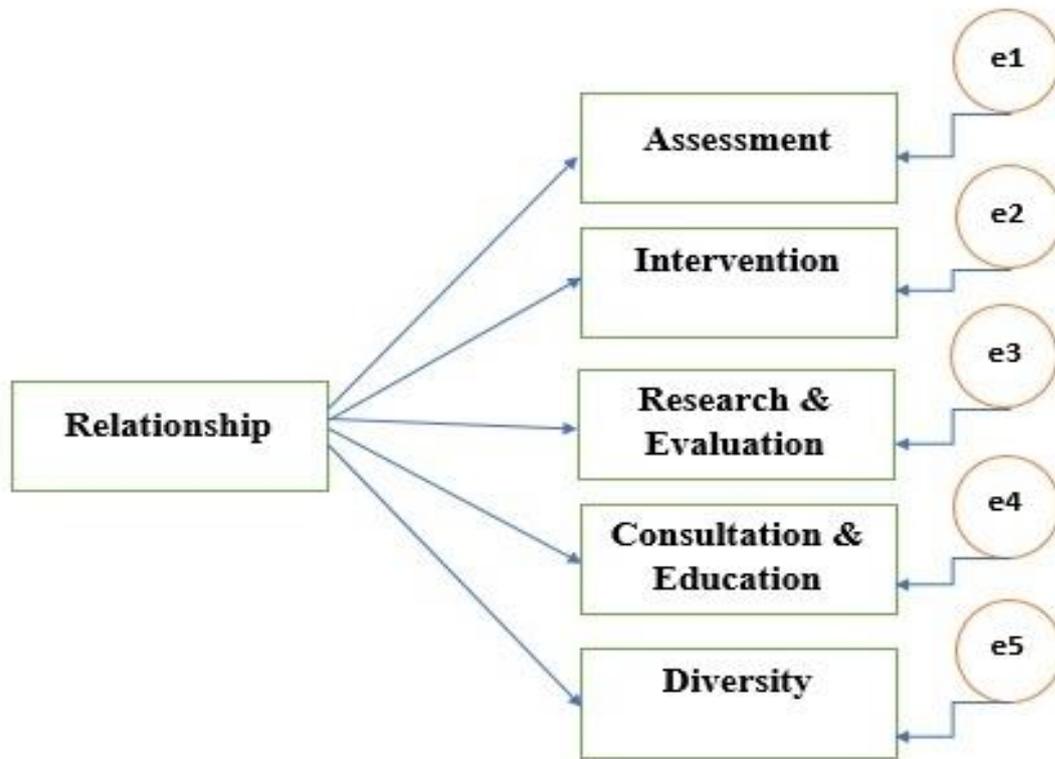
*. The mean difference is significant at the 0.05 level.

Table 3.11 represents one-way analysis of variance between dimensions of professional development and work experience. Out of all dimensions, there is a significant difference among the responses of practitioners from less than 5 years of experience, 6 – 10 years of experience and more than 10 years of experience and Relationship, Intervention, Research and Evaluation, Consultation and Education and Diversity. There is no significant difference between work experience and assessment and technological competence. It can be interpreted that practitioners from different work experiences perceives dimensions differently in terms of relationship, Intervention, Research and Evaluation, Consultation and Education and Diversity

3.2.3 - Section III – Professional Development Competencies

Professional development competencies adopted from the model of National Council for School Programs and Professional Psychology (NCSPP) were Relationship, Assessment, Intervention, Research and Evaluation, Consultation and Education and Diversity. Structured equation modeling (SEM) was used to measure the relationships between these competencies. SEM is a multivariate statistical analysis technique to determine structural relationships between variables. In this study, SEM will be applied to understand all professional development competencies make good model. The model will be constructed by keeping one competency construct with all other competencies as follows.

- a) To study the effect of Relationship on Assessment, Intervention, Research and Evaluation, Consultation and Education, Diversity and Technological issues, Structural Equation Modelling (SEM) was used and the results are shown below:



Legends: —————> Significant impact > No significant impact

Figure – 3.7 – SEM model of Relationship Competency.

Table: 3.12: Fit Measurement of Model

Fit Measures	X ² (Significant)	DF	X ² /DF	CFI	GFI (AGFI)	NFI	TLI	IFI	RMSEA
Default Model	5.106 (0.05)	1	5.106	0.996	0.996 (0.878)	0.996	0.926	0.997	0.111

Table 3.12 indicate fit measures of models. Chi-square(X²) values were very sensitive to sample size, the relative Chi-square values (X²/DF) were estimated that were not below the prescribed level of 3 (Kline 1998). The model Chi-square(X²) values is 5.106 which is significant at 0.05 (X²(9) =5.106, p <0.05). The model X²/DF is 5.106 which is less than 5 that means model is fit (X²/DF <5). Hence, other fit measures of the models were considered. Goodness of Fit Index (GFI) is analogous to square multiple correlations (R²) in multiple regressions. GFI is 0.996 which is more than 0.90 (GFI < 0.90). Comparative fit

index (CFI) indicates the overall fit of the model relative to a null model and Normed fit index (NFI) adjusts for the complexity of the model. Tucker-Lewis index (TLI) shows overall performance of model. CFI, GFI, TLI and NFI had values above or close to the cut off limit of 0.9. For the model CFI is 0.996, GFI is 0.996, NFI is 0.996 and TLI is 0.926. That mean all other measure is above 0.90 and the model is fit. Adjusted Goodness of Fit Index (AGFI) is attempting to adjust the GFI for complexity of Model. AGFI is 0.878 which is Above 0.90 that means Model is Perfect. Incremental fit index (IFI) is 0.997 that means model is fit. Root Mean Square Error Approximation (RMSEA) indicates the approximation of the observed model to the true model. Lower the RMSEA, the better is the model. RMSEA is 0.111. The value of RMSEA is below the prescribed limit of 0.08 in the model.

Hence, it can be derived from above table and various fit indexes such as GFI, CFI, NFI, TLI, AGFI an IFI that relationship competency makes a good model fit with other competencies such as assessment, intervention, research and evaluation, consultation and education and diversity.

The first competency of professional development of psychology professionals is relationship. Relationship is the capacity to develop and maintain constructive working alliance with peers, colleagues, supervisors, members of other disciplines, clients of services and community organizations. It is derived from the above model that Relationship have positive significant influence on other dimensions of professional development. According to Peterson (2008), essential behavior, a psychology student need to acquire from Relationship competency include, intellectual curiosity and flexibility, open-mindedness, Belief in the Capacity of Change, Appreciation of Individual and Cultural Difference, Personal Integrity and Honesty, and Belief in the Value of Self-Awareness

Table 3.13 Path Analytic Results of Hypotheses (relationship predict another dimension)

Criterion variable	Explanatory variable	SRW	URW	SE	CR	p Sig.	Decision
C_asses	← C_Relationship	0.564	0.561	0.045	12.439	0.01	H ₁ accepted
C_Int	← C_Relationship	0.639	0.639	0.042	15.152	0.01	H ₁ Accepted

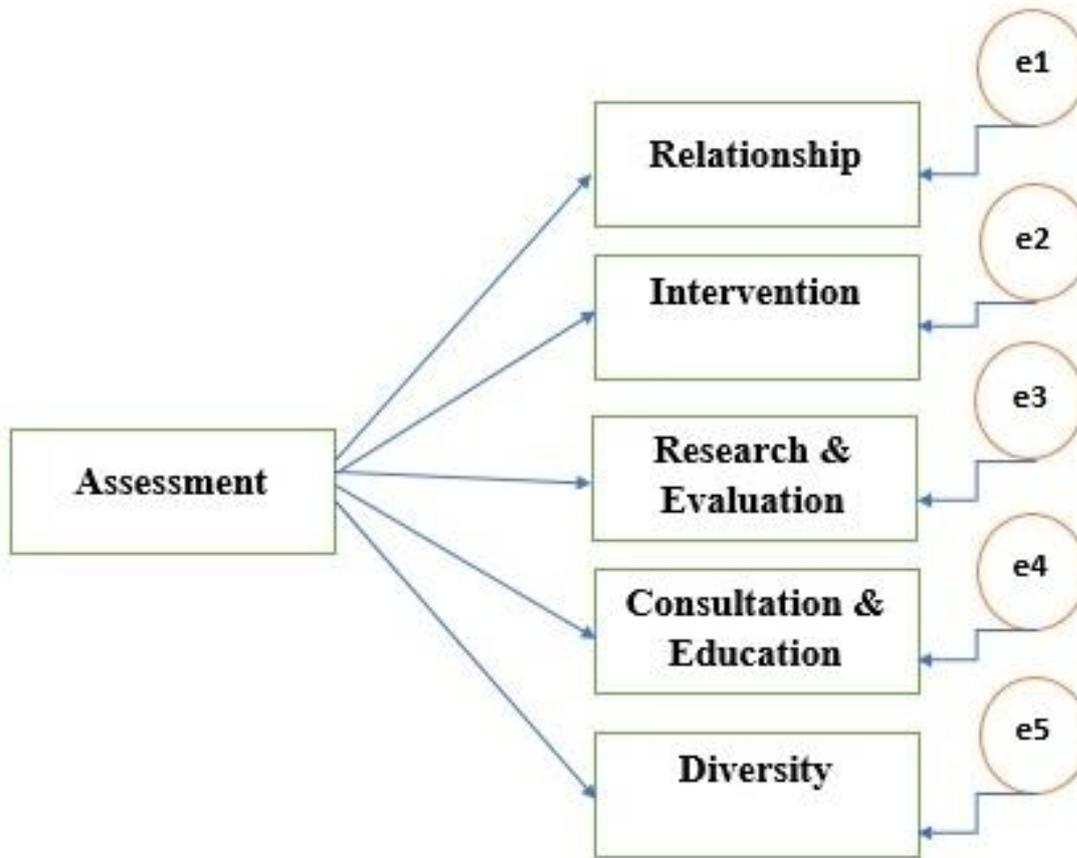
C_Research	← C_Relationship	0.410	0.401	0.049	8.199	0.01	H ₁ Accepted
C_Consult	← C_Relationship	0.524	0.517	0.046	11.212	0.01	H ₁ accepted
C_Div	← C_Relationship	0.511	0.507	0.047	10.846	0.01	H ₁ accepted

Note: SRW standardized regression weights; URW unstandardized regression weights, SE Standard Error and CR- Critical Ratio

Table 3.13 indicates that Explanatory variable (Independent Variable) Predicts Criterion variable (dependent variable). Relationship significantly positively predicts C_Assesme (SRW=0.564, $p < 0.01$). Relationship positively predicts Intervention (SRW=0.639, $p < 0.01$). Relationship significantly predicts research and evaluation (SRW=0.410, $p < 0.01$). Relationship significantly predicts consultation and education (SRW=0.524, $p < 0.01$). Relationship significantly predicts diversity (SRW=0.511, $p < 0.01$).

Form path analysis and measurement table, it can be derived that the model is fit and there is significant positive effect of relationship competency of professional development on other competencies namely assessment, intervention, research and evaluation, consultation and education and diversity.

b) To study the effect of Assessment on relationship, intervention, research and evaluation, consultation and education, diversity and Technological issues, Structural Equation Modelling (SEM) was used and the results are shown below:



Legends: Significant impact No significant impact

Figure 3.8 - SEM model of Assessment Competency.

Table: 3.14 - Fit Measurement of Model

Fit Measures	X ² (Significant)	DF	X ² /DF	CFI	GFI (AGFI)	NFI	TLI	IFI	RMSEA
Default Model	13.477 (0.01)	4	3.369	0.992	.989 (.921)	0.989	0.957	0.992	0.084

Table 3.14 indicate fit measures of models. Chi-square(X²) values were very sensitive to sample size, the relative Chi-square values (X²/DF) were estimated that were not below the prescribed level of 3 (Kline 1998). The model Chi-square(X²) values is 13.477 which is significant at 0.01 (X²(4) = 13.477, p < 0.01). The model X²/DF is 3.369 which is less than 5 that means model is fit (X²/DF < 5). Hence, other fit measures of the models were considered. Goodness of Fit Index (GFI) is analogous to square multiple correlations (R²) in

multiple regressions. GFI is 0.989 which is more than 0.90 (GFI < 0.90). Comparative fit index (CFI) indicates the overall fit of the model relative to a null model and Normed fit index (NFI) adjusts for the complexity of the model. Tucker-Lewis index (TLI) shows overall performance of model. CFI, GFI, TLI and NFI had values above or close to the cut off limit of 0.9. For the model CFI is 0.992, GFI is 0.989, NFI is 0.989 and TLI is 0.957. That mean all other measure is above .90 and the model is fit. Adjusted Goodness of Fit Index (AGFI) is attempting to adjust the GFI for complexity of Model. AGFI is 0.921 which is Above 0.90 that means Model is Perfect. Incremental fit index (IFI) is 0.992 that means model is fit. Root Mean Square Error Approximation (RMSEA) indicates the approximation of the observed model to the true model. Lower the RMSEA, the better is the model. RMSEA is 0.084. The value of RMSEA is below the prescribed limit of 0.08 in the model.

Hence, it can be derived from above table and various fit indexes such as GFI, CFI, NFI, TLI, AGFI an IFI that assessment competency makes a good model fit with other competencies such as relationship, intervention, research and evaluation, consultation and education and diversity.

The Second dimension of professional development is assessment. Krishnamurthy (2004) described psychological assessment as a complex, integrative and conceptual activity which involve making inferences from multiple sources of information to achieve a comprehensive understanding of a client. NCSPP (2007) also suggested that assessment also involves an ability to measure and formulate degree of need and mental status, development of psychological profiles in response to particular problem and evaluate outcome with tests. The assessment competency is essential for students to integrate data from multiple resources, to effectively answer referral questions and to communicate that inferences and recommendations clearly. The assessment composed of four domains such as, interviewing and relationships, case formulation, psychological testing and ethics and professionalism.

Table 3.15 - Path Analytic Results of Hypotheses (Assessment predict another dimension)

Criterion variable		Explanatory variable	SRW	URW	SE	CR	p sig.	Decision
C_Relation	←	C_Assesme	0.56	0.561	0.04	12.35	0.01	H ₁ Accepted

C_Int	←	C_Assesme	0.62	0.622	0.04	14.44	0.01	H ₁ Accepted
C_Research	←	C_Assesme	0.56	0.561	0.04	12.59	0.01	H ₁ Accepted
C_Consult	←	C_Assesme	0.52	0.510	0.04	11.12	0.01	H ₁ Accepted
C_Div	←	C_Assesme	0.59	0.586	0.04	13.46	0.01	H ₁ Accepted
C_tech	←	C_Assesme	0.29	0.297	0.05	5.657	0.01	H ₁ Accepted

Note: SRW standardized regression weights; URW unstandardized regression weights, SE Standard Error and CR- Critical Ratio

Table 3.15 indicates that Explanatory variable (Independent Variable) Predicts Criterion variable (dependent variable). Assessment significantly positively predicts relationship (SRW=0.561, $p < 0.01$). Assessment significantly positively predicts Intervention (SRW=0.621, $p < 0.01$). Assessment positively predicts research (SRW=0.569, $p < 0.01$). Assessment significantly predicts Consultation (SRW= 0.521, $p < 0.01$). Assessment positively predicts Diversity (SRW=0.564, $p < 0.01$). Assessment significantly predicts technology (SRW=0.296, $p < 0.01$).

Form path analysis and measurement table, it can be derived that the model is fit and there is significant positive effect of assessment competency of professional development on other competencies namely relationship, intervention, research and evaluation, consultation and education and diversity.

c) To study the effect of intervention on Relationship, Assessment, research and evaluation, consultation and education, diversity and Technological issues, Structural Equation Modelling (SEM) was used and the results are shown below:

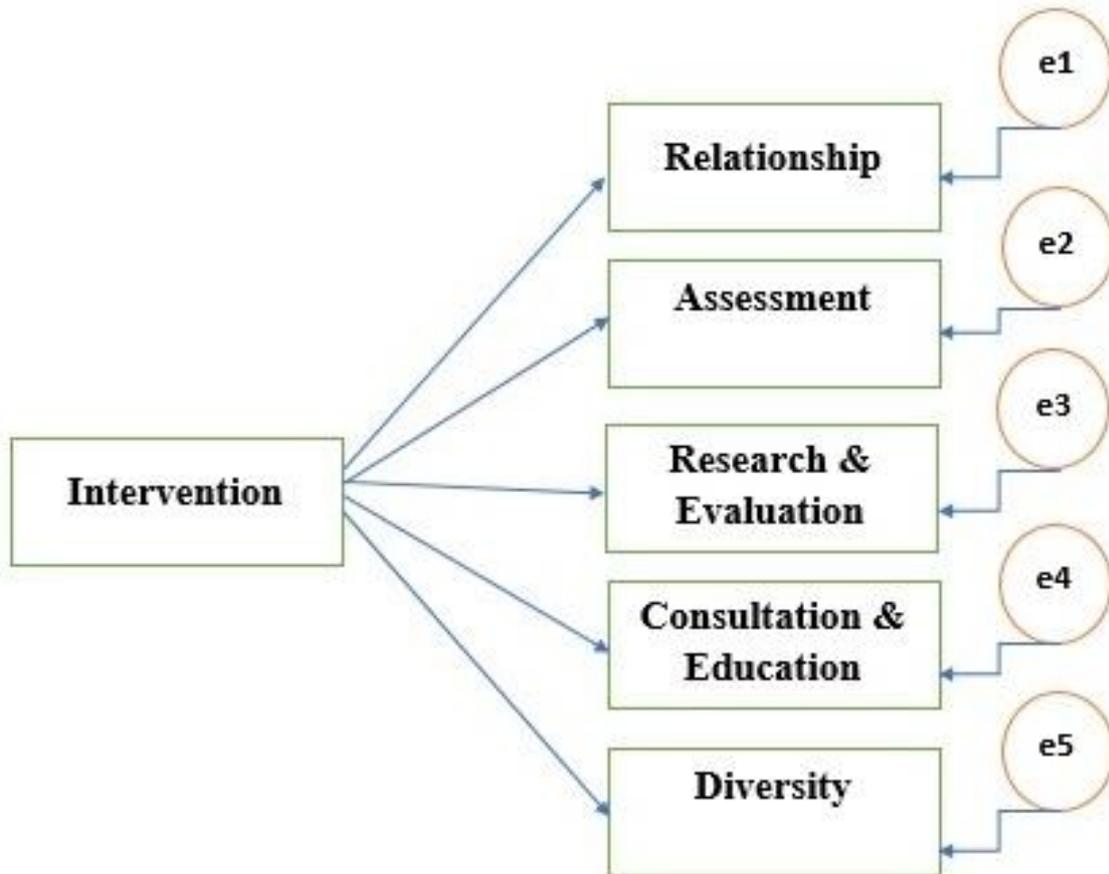


Figure 3.9 - SEM model of Intervention Competency.

Table: 3.16 - Fit Measurement of Model

Fit Measures	X ² (Significant)	DF	X ² /DF	CFI	GFI (AGFI)	NFI	TLI	IFI	RMSEA
Default Model	10.145 (0.01)	2	5.07	.993	.991 (.881)	.991	.927	.993	0.111

Table 3.16 indicates fit measures of models. Chi-square(X^2) values were very sensitive to sample size, the relative Chi-square values (X^2/DF) were estimated that were not below the prescribed level of 3 (Kline 1998). The model Chi-square(X^2) values is 10.145 which is significant at 0.01 ($X^2(4) = 10.145, p < 0.01$). The model X^2/DF is 5.07 which is less than 5 that means model is fit ($X^2/DF < 5$). Hence, other fit measures of the models were considered. Goodness of Fit Index (GFI) is analogous to square multiple correlations (R^2) in multiple regressions. GFI is 0.991 which is more than 0.90 ($GFI < 0.90$). Comparative fit

index (CFI) indicates the overall fit of the model relative to a null model and Normed fit index (NFI) adjusts for the complexity of the model. Tucker-Lewis index (TLI) shows overall performance of model. CFI, GFI, TLI and NFI had values above or close to the cut off limit of 0.9. For the model CFI is 0.993, GFI is 0.991, NFI is 0.991 and TLI is 0.927. That mean all other measure is above .90 and the model is fit. Adjusted Goodness of Fit Index (AGFI) is attempting to adjust the GFI for complexity of Model. AGFI is 0.881 which is Above 0.90 that means Model is Perfect. Incremental fit index (IFI) is 0.993 that means model is fit. Root Mean Square Error Approximation (RMSEA) indicates the approximation of the observed model to the true model. Lower the RMSEA, the better is the model. RMSEA is 0.111. The value of RMSEA is below the prescribed limit of 0.08 in the model.

Hence, it can be derived from above table and various fit indexes such as GFI, CFI, NFI, TLI, AGFI an IFI that intervention competency makes a good model fit with other competencies such as relationship, assessment, research and evaluation, consultation and education and diversity.

The third competency of professional development is intervention, which includes activities that promote, restore and enhance positive functioning and a sense of well-being in clients through preventive, developmental and remedial activities. Peterson (1997) stated that the intervention competency requires understanding of theory and its application in personality, psychotherapy, change processes and the interactions and influences of social, environmental, cultural and physiological factors. The domains under intervention competency are planning, implementation, evaluation and ethics.

Table 3.17 - Path Analytic Results of Hypotheses (intervention predict another dimension)

Criterion variable	Explanatory variable	SRW	URW	SE	CR	Sig.	Decision
C_Relation	← C_Int	0.639	0.639	0.042	15.152	0.01	H ₁ accepted
C_Assesme	← C_Int	0.626	0.621	0.042	14.633	0.01	H ₁ Accepted
C_Research	← C_Int	0.468	0.461	0.048	9.639	0.01	H ₁ Accepted

C_Consult	← C_Int	0.561	0.553	0.045	12.362	0.01	H ₁ accepted
C_Div	← C_Int	0.549	0.543	0.045	11.971	0.01	H ₁ accepted
C_tech	← C_Int	0.255	0.255	0.053	4.799	0.01	H ₁ accepted

Note: SRW standardized regression weights; URW unstandardized regression weights, SE Standard Error and CR- Critical Ratio

Table 3.17 indicates that Explanatory variable (Independent Variable) Predicts Criterion variable (dependent variable). Intervention significantly positively predicts relationship (SRW=0.639, $p < 0.01$). Intervention significantly positively predicts assessment (SRW=0.626, $p < 0.01$). Intervention positively predicts research (SRW=0.468, $p < 0.01$). Intervention significantly predicts Consultation (SRW= 0. 561, $p < 0.01$). Intervention positively predicts Diversity (SRW=0.549, $p < 0.01$). Assessment significantly predicts technology (SRW=0.255, $p < 0.01$).

Form path analysis and measurement table, it can be derived that the model is fit and there is positive significant effect of intervention competency of professional development on other competencies namely relationship, assessment, research and evaluation, consultation and education and diversity.

d) To study the effect of research and evaluation on Relationship, Assessment, Intervention, consultation and education, diversity and Technological issues, Structural Equation Modelling (SEM) was used and the results are shown below:

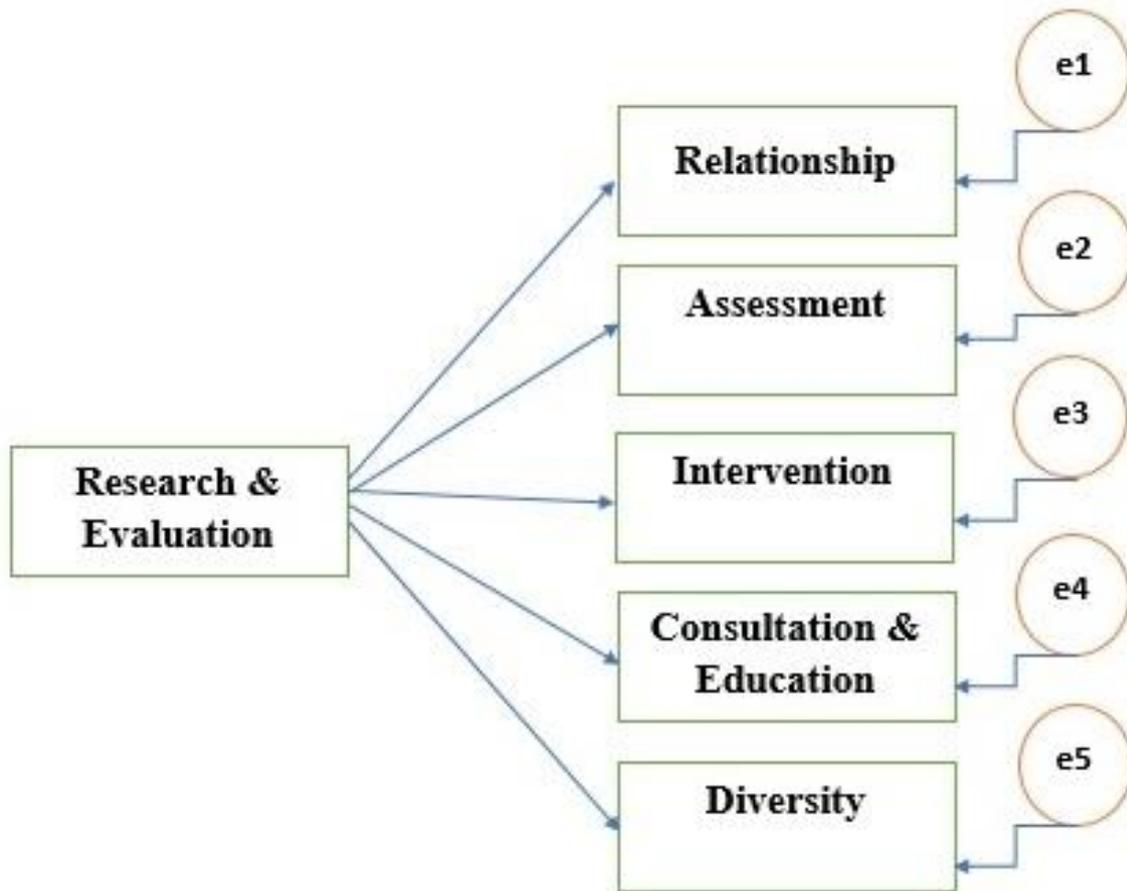


Figure 3.10 - SEM model of Research and Evaluation Competency.

Table: 3.18 - Fit Measurement of Model

Fit Measures	X ² (Significant)	DF	X ² /DF	CFI	GFI (AGFI)	NFI	TLI	IFI	RMSEA
Default Model	10.197 (0.01)	4	2.549	0.995	0.991 (0.940)	0.991	0.972	0.995	0.068

Table 3.18 indicates fit measures of models. Chi-square(X^2) values were very sensitive to sample size, the relative Chi-square values (X^2/DF) were estimated that were not below the prescribed level of 3 (Kline 1998). The model Chi-square(X^2) values is 10.197 which is significant at 0.01 ($X^2(4) = 10.197, p < 0.01$). The model X^2/DF is 2.549 which is less than 5 that means model is fit ($X^2/DF < 5$). Hence, other fit measures of the models were considered. Goodness of Fit Index (GFI) is analogous to square multiple correlations (R^2) in

multiple regressions. GFI is 0.991 which is more than 0.991 (GFI < 0.90). Comparative fit index (CFI) indicates the overall fit of the model relative to a null model and Normed fit index (NFI) adjusts for the complexity of the model. Tucker-Lewis index (TLI) shows overall performance of model. CFI, GFI, TLI and NFI had values above or close to the cut off limit of 0.9. For the model CFI is 0.995, GFI is 0.991, NFI is 0.991 and TLI is 0.972. That mean all other measure is above .90 and the model is fit. Adjusted Goodness of Fit Index (AGFI) is attempting to adjust the GFI for complexity of Model. AGFI is 0.940 which is Above 0.90 that means Model is Perfect. Incremental fit index (IFI) is 0.993 that means model is fit. Root Mean Square Error Approximation (RMSEA) indicates the approximation of the observed model to the true model. Lower the RMSEA, the better is the model. RMSEA is 0.068. The value of RMSEA is below the prescribed limit of 0.08 in the model.

Hence, it can be derived from above table and various fit indexes such as GFI, CFI, NFI, TLI, AGFI an IFI that research and evaluation competency makes a good model fit with other competencies such as relationship, assessment, intervention, consultation and education and diversity.

The fourth competency research and evaluation consist of three domains: critical evaluation of research, conducting and using research in applied settings and ethics and professional competence. Critical evaluations of research include the ability to locate, evaluate and titrate professional literature and determine the applicability of that literature to essential clinical issues. It also requires an openness of multiple ways of knowing and importantly understanding of strengths and weakness of different forms of research. It also states the ability to design, implement and interpret research and

Table 3. 19 - Path Analytic Results of Hypotheses (Research predict another dimension)

Criterion variable	Explanatory variable	SRW	URW	SE	CR	p sig.	Decision
C_Relation	← C_Research	0.407	0.412	0.051	8.111	0.01	H ₁ accepted
C_Assesme	← C_Research	0.569	0.576	0.046	12.591	0.01	H ₁ Accepted

C_Int	← C_Research	0.468	0.474	0.049	9.639	0.01	H ₁ Accepted
C_Consult	← C_Research	0.571	0.571	0.045	12.661	0.01	H ₁ accepted
C_Div	← C_Research	0.748	0.758	0.037	20.524	0.01	H ₁ accepted
C_tech	← C_Research	0.431	0.437	0.050	8.704	0.01	H ₁ accepted

Notes: SRW standardized regression weights; URW unstandardized regression weights, SE Standard Error and CR- Critical Ratio

Table 3.19 indicates that Explanatory variable (Independent Variable) Predicts Criterion variable (dependent variable). Research significantly positively predicts relationship (SRW=0.407, $p < 0.01$). Research significantly positively predicts assessment (SRW=0.569, $p < 0.01$). Research positively predicts Intervention (SRW=0.468, $p < 0.01$). Research significantly predicts Consultation (SRW= 0.571, $p < 0.01$). Research positively predicts Diversity (SRW=0.748, $p < 0.01$). Research significantly predicts technology (SRW=0.431, $p < 0.01$).

Form path analysis and measurement table, it can be derived that the model is fit and there is significant positive effect of research and evaluation competency of professional development on other competencies namely relationship, intervention, assessment, consultation and education and diversity.

e) To study the effect of Consultation and Education on Relationship, Assessment, Research and Intervention, diversity and Technological issues, Structural Equation Modelling (SEM) was used and the results are shown below,

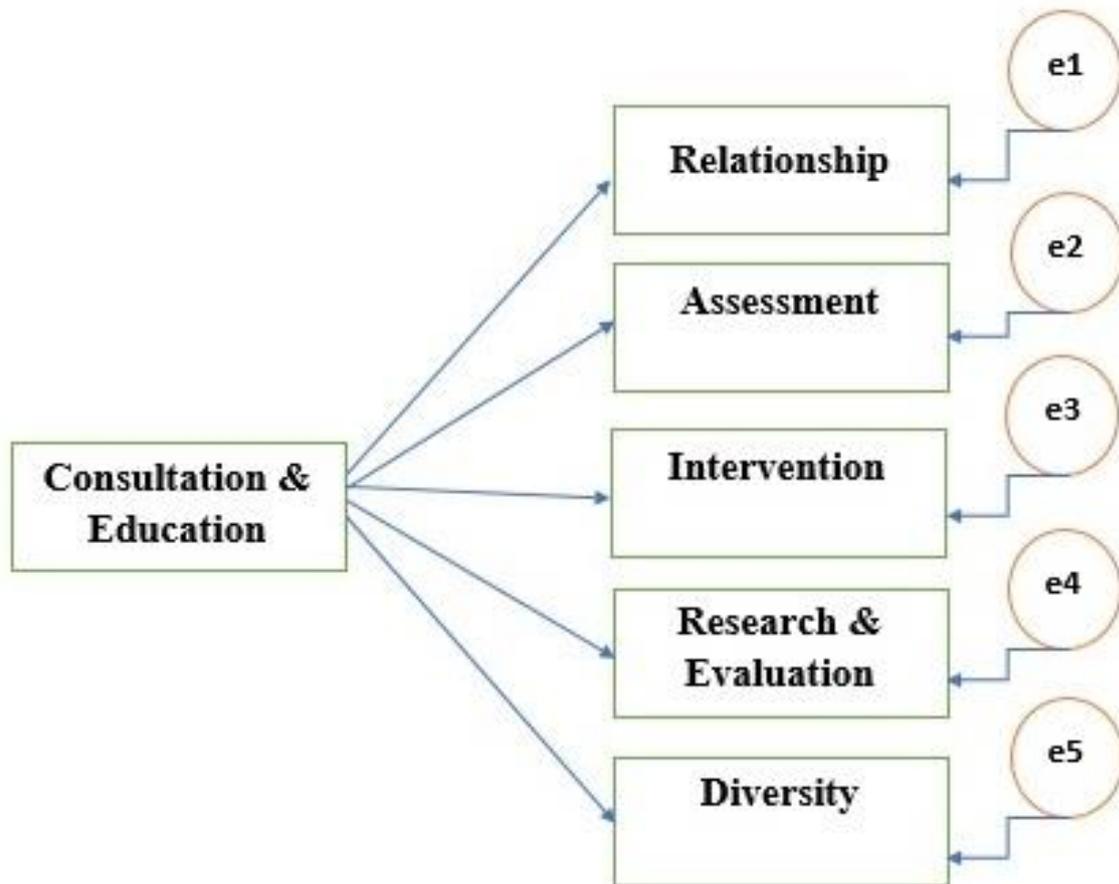


Figure 3.11 - SEM model of Consultation and Education Competency.

Table: 3.20 - Fit Measurement of Model

Fit Measures	X ² (Significant)	DF	X ² /DF	CFI	GFI (AGFI)	NFI	TLI	IFI	RMSEA
Default Model	16.734 (0.01)	4	4.184	0.989	0.986 (0.903)	0.986	0.943	0.989	0.098

Table 3.19 indicates fit measures of models. Chi-square(X^2) values were very sensitive to sample size, the relative Chi-square values (X^2/DF) were estimated that were not below the prescribed level of 3 (Kline 1998). The model Chi-square(X^2) values is 16.734 which is significant at 0.01 ($X^2(4) = 16.734, p < 0.01$). The model X^2/DF is 4.184 which is less than 5 that means model is fit ($X^2/DF < 5$). Hence, other fit measures of the models were considered. Goodness of Fit Index (GFI) is analogous to square multiple correlations (R^2) in multiple regressions. GFI is 0.986 which is more than 0.991 ($GFI < 0.90$). Comparative fit

index (CFI) indicates the overall fit of the model relative to a null model and Normed fit index (NFI) adjusts for the complexity of the model. Tucker-Lewis index (TLI) shows overall performance of model. CFI, GFI, TLI and NFI had values above or close to the cut off limit of 0.9. For the model CFI is 0.989, GFI is 0.986, NFI is 0.986 and TLI is 0.943. That mean all other measure is above .90 and the model is fit. Adjusted Goodness of Fit Index (AGFI) is attempting to adjust the GFI for complexity of Model. AGFI is 0.903 which is Above 0.90 that means Model is Perfect. Incremental fit index (IFI) is 0.989 that means model is fit. Root Mean Square Error Approximation (RMSEA) indicates the approximation of the observed model to the true model. Lower the RMSEA, the better is the model. RMSEA is 0.098. The value of RMSEA is below the prescribed limit of 0.08 in the model.

Hence, it can be derived from above table and various fit indexes such as GFI, CFI, NFI, TLI, AGFI an IFI that consultation and education competency makes a good model fit with other competencies such as relationship, assessment, intervention, research and evaluation and diversity.

The fifth competency of Professional development is consultation and education. Consultation refers to planned collaborative interaction between psychology professional and a client or colleague in relation to identified. Education is facilitated by psychology professional for the growth of knowledge, skills and attitude of the learner. NCSPP (2007) also stated that the education competency also involves skill building in facilitating student knowledge acquisition and scholarly and personal development. Domains under the consultation and education competency are regarding knowledge of evidence-based theories, models and intervention, integration of research and evaluation

Table 3.21 - Path Analytic Results of Hypotheses (Consultation predict another dimension)

Criterion variable	Explanatory variable	SRW	URW	SE	CR	P sig.	Decision
C_Relation	← C_Consult	0.520	0.523	0.047	11.090	0.01	H ₁ accepted
C_Assesme	← C_Consult	0.512	0.515	0.047	10.866	0.01	H ₁ Accepted

C_Int	← C_Constult	0.556	0.559	0.046	12.195	0.01	H ₁ Accepted
C_Research	← C_Constult	0.574	0.562	0.044	12.761	0.01	H ₁ accepted
C_Div	← C_Constult	0.713	0.718	0.039	18.549	0.01	H ₁ accepted
C_tech	← C_Constult	0.399	0.401	0.051	7.929	0.01	H ₁ accepted

Note: SRW standardized regression weights; URW unstandardized regression weights, SE Standard Error and CR- Critical Ratio

Table 3.20 indicates that Explanatory variable (Independent Variable) Predicts Criterion variable (dependent variable). Consultation significantly positively predicts relationship (SRW=0.520, $p < 0.01$). Consultation significantly positively predicts assessment (SRW=0.512, $p < 0.01$). Consultation positively predicts Intervention (SRW=0.556, $p < 0.01$). Consultation significantly predicts research (SRW= 0.574, $p < 0.01$). Consultation positively predicts Diversity (SRW=0.713, $p < 0.01$). Consultation significantly predicts technology (SRW=0.399, $p < 0.01$).

Form path analysis and measurement table, it can be derived that the model is fit and there is significant positive effect consultation and education competency of professional development on other competencies namely relationship, intervention, assessment, research and evaluation and diversity.

f) To study the effect of Diversity on Relationship, Assessment, Research and Intervention, Consultation and Technological issues, Structural Equation Modelling (SEM) was used and the results are shown below:

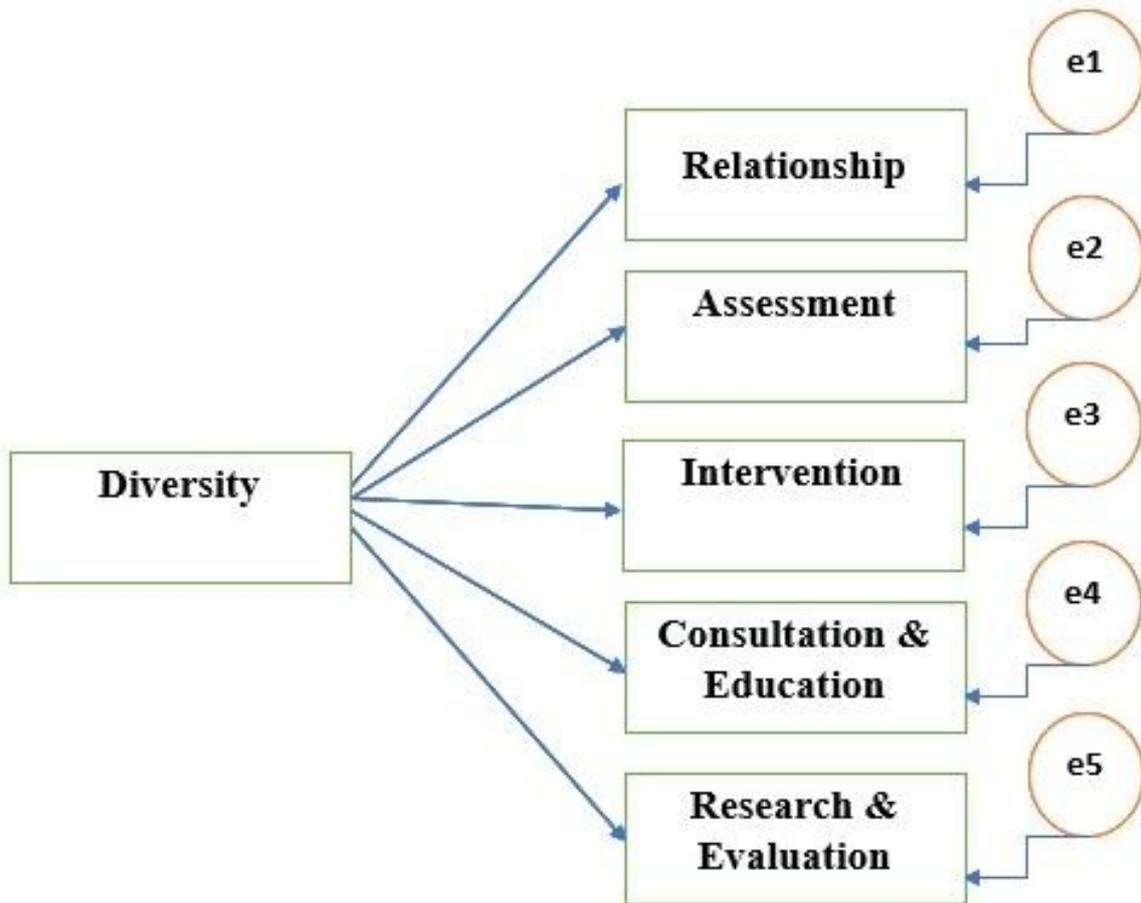


Figure 3.12 - SEM model of Diversity Competency.

Table 3.22 - Fit Measurement of Model

Fit Measures	X² (Significant)	DF	X²/DF	CFI	GFI (AGFI)	NFI	TLI	IFI	RMSEA
Default Model	4.049 (0.01)	1	4.049	.997	0.997 (0.903)	0.997	0.945	0.997	0.096

Table 3.21 indicates fit measures of models. Chi-square(X^2) values were very sensitive to sample size, the relative Chi-square values (X^2/DF) were estimated that were not below the prescribed level of 3 (Kline 1998). The model Chi-square(X^2) values is 4.049 which is significant at 0.01 ($X^2(1) = 4.049, p < 0.01$). The model X^2/DF is 4.049 which is less than 5 that means model is fit ($X^2/DF < 5$). Hence, other fit measures of the models were considered. Goodness of Fit Index (GFI) is analogous to square multiple correlations (R^2) in multiple regressions. GFI is 0.997 which is more than 0.991 ($GFI < 0.90$). Comparative fit

index (CFI) indicates the overall fit of the model relative to a null model and Normed fit index (NFI) adjusts for the complexity of the model. Tucker-Lewis index (TLI) shows overall performance of model. CFI, GFI, TLI and NFI had values above or close to the cut off limit of 0.9. For the model CFI is 0.997, GFI is 0.997, NFI is 0.997 and TLI is 0.945. That mean all other measure is above .90 and the model is fit. Adjusted Goodness of Fit Index (AGFI) is attempting to adjust the GFI for complexity of Model. AGFI is 0.903 which is Above 0.90 that means Model is Perfect. Incremental fit index (IFI) is 0.997 that means model is fit. Root Mean Square Error Approximation (RMSEA) indicates the approximation of the observed model to the true model. Lower the RMSEA, the better is the model. RMSEA is 0.096. The value of RMSEA is below the prescribed limit of 0.08 in the model.

Hence, it can be derived from above table and various fit indexes such as GFI, CFI, NFI, TLI, AGFI an IFI that diversity competency model is fit with other competencies such as relationship, assessment, intervention, research and evaluation and consultation and education.

The diversity competency requires the ability to identify and understand issues of individual and cultural differences (ICD) and issues of power, privilege and oppression. It was derived from the above diagram that diversity is significantly influencing all other dimensions of professional development. Important aspects of diversity which psychology professionals need to understand are, age, disability and health, ethnicity, gender, language, nationality, race, religion and spirituality, sexual orientation and socio-economic status.

Table 3.23 - Path Analytic Results of Hypotheses (Diversity predict another dimension)

Criterion variable	Explanatory variable	SRW	URW	SE	CR	p sig	Decision
C_Relation	← C_Div	0.507	0.507	0.047	10.717	0.01	H ₁ accepted
C_Assesme	← C_Div	0.589	0.585	0.044	13.271	0.01	H ₁ Accepted
C_Int	← C_Div	0.543	0.543	0.046	11.789	0.01	H ₁ Accepted

C_Research	← C_Div	0.748	0.738	0.036	20.524	0.01	H ₁ accepted
C_Consult	← C_Div	0.714	0.709	0.038	18.572	0.01	H ₁ accepted
C_tech	← C_Div	0.423	0.423	0.050	8.508	0.01	H ₁ accepted

Note: SRW standardized regression weights; URW unstandardized regression weights, SE Standard Error and CR- Critical Ratio

Table 3.22 indicates that Explanatory variable (Independent Variable) Predicts Criterion variable (dependent variable). Diversity significantly positively predicts relationship (SRW=0.507, $p < 0.01$). Diversity significantly positively predicts assessment (SRW=0.589, $p < 0.01$). Diversity positively predicts Intervention (SRW=0.543, $p < 0.01$). Diversity significantly predicts research (SRW= 0.748, $p < 0.01$). Diversity positively predicts consultation (SRW=0.714, $p < 0.01$). Diversity significantly predicts technology (SRW=0.423, $p < 0.01$). From path analysis and measurement table, it can be derived that the model is fit and there is significant positive effect diversity competency of professional development on other competencies namely relationship, intervention, assessment, research and evaluation and consultation and education.

Hence, from all above models, it can be derived that all professional development competencies are positively significant to each other and these competencies can be used for the training for professional development of psychology professionals.

3.3 - QUALITATIVE FINDINGS

Qualitative research focuses on how individuals and groups view and understand the world and construct meaning out of their experiences. The subjective element in the research process is acknowledged in this type of research methods. Qualitative research facilitates the generation of novel insights and new understandings by tapping into the perspectives and interpretations of participants and giving the researcher an opportunity to study meanings of participants' views.

The qualitative part of this study comprised of semi-structured interviews of 10 psychology professionals in India. Thematic content analysis was used to analyze qualitative

data obtained from interviews of psychology professionals. The qualitative data was analyzed by examining, categorizing, and recombining the participants' responses to find out emerging themes, in order to gain a deeper understanding of existing scenario of education of psychology at post-graduate level, psychological practices and need of professional regulation in India.

Thematic analysis involves the following six phases (Braun and Clarke, 2006):

1. Familiarizing yourself with your data: This involves reading and re-reading the data, in an active way; that is, looking for meanings and patterns in the data.
2. Generating the initial codes: This phase involves organizing the data into meaningful groups. It may be done by highlighting potential patterns in the content.
3. Searching for themes: This involves sorting the different codes into potential themes. It basically involves analyzing the codes and considering how different codes could combine to form a theme.
4. Reviewing themes: This phase involves reviewing and refining the initial themes extracted from the coded data.
5. Defining and naming themes: This phase involves further reviewing the themes, determining the aspect of the data that each theme captures, and naming them as per essence of each theme.
6. Producing the report: This involves the write-up on the themes that have emerged, it also includes examples and extracts from the data. It also involves relating the analysis to research question and related literature.

In this study, qualitative analysis is described in three sections

Section I – Content analysis of Interviews of Practitioners

Section II – Review of Curriculum of Psychology in Postgraduation in India

Section III – Review of Various Psychological Associations and Professional Development of Psychologists Around the World.

3.3.1 - Section I – Content Analysis of Interviews of Practitioners

This section explains the qualitative data collected from the interviews of practitioners. The semi-structured interviews were used to collect the data. The responses were audio recorded by the researcher and then transcribed. Collected data were categorized in to certain themes as per the objectives of the study.

This process was used to interpret the qualitative data in the current study. The researcher read and reviewed the qualitative data several times, then highlighted the meaningful points to form initial codes. The codes were then noted down separately and potential themes emerging from these codes were noted alongside. These themes were then reviewed, after which they were given names as per their essence. The themes that thus emerged are delineated below.

Table 3.24 - Objective Wise Emerged Themes from Coding of the Interviews of Practitioners

THEMES	1	2	3	4	5	6	7	8	9	10	
Psychology Scenario	Practice Oriented Teaching				In Abroad - Emphasis on Documentation, Confidentiality, Ethical Assessment - Difficulty to Adjust in India	"Psychology Needs Importance"		Institutes like, NIMHANS, RIPHANS, IBHAAS, should take an initiative for accreditation of psychology	RAM RAJYA' - People Do What they think is good and Convenient to them		
Selection of Psychology Subject	Interest and Experiences in UG		Gradation of Specializations - CP, IP, CP and EP	Students' Ability to sustain in the field - BEYOND MERIT		Personality / Interest Test					BEYOND MERIT, Specialization - Aptitude

Curriculum

	BEYOND MERIT, Specialization – Aptitude	Orientation of Students about Specialization	BEYOND MERIT, Specialization – Aptitude	"Students are pushed to select specialization"			BEYOND MERIT, Specialization - Aptitude	Students' Conceptual Clarity for Specialization - WHY and WHAT	
No Practice Orientation	Importance of Theory and Experiential Learning	Inclusion of Theory and Practice in Curriculum	Equal weightage to Theory and Practice	Less emphasis on Practice as compared to Theory	Uniform Curriculum	Training During PG	Professional Culture during PG	Supervised Training in PG Internships	Uniform Curriculum
Uniform Curriculum	Importance of Research	Need of Training Need during PG	Importance of Research	Updating of Curriculum	Updating as per international standards	Uniform Curriculum	Link between Teaching and Psychological Practice		training oriented curriculum
Link between Teaching and Psychological Practice	Uniform Curriculum	Link between Teaching and Psychological Practice	Teaching Psychology Subject in Every Discipline	No Practical Experience in PG		Link between Teaching and Psychological Practice	Updating of Curriculum		Equal weightage to Theory and Practice
		Updating of Curriculum	Practical Orientation of Theories	Research is only if - Academics, Not for Practice			Uniform Curriculum		
	Link between Teaching and Psychological Practice	Curriculum Development (Inputs of Psychological Practitioners)		Uniform Curriculum			Need of Books in Indian Context		

Challenges in Practices

	No Training in PG	Lack of Awareness	Lack of Guidance for Sources to undertake Training	Status of Psychologist - Not Grounded	Lack of Awareness	lack of man power as per population	Authenticity of Psychology is concern	Impact on Quality due to Malpractices	BIFURCATION OF SPECIALIZATIONS IN SOCIETY	lack of man power as per population
	Standardization of Definition - Psychologist, Counsellor	Doubts about RCI	Influence of Psychiatrist Over CP	Lack of Awareness	No Centralized System	Migration of trained people to abroad due to lack of system	Lack of Guidance - what after PG?	Malpractices	MENTAL HEALTH AWARENESS	Migration of trained people to abroad due to lack of system
	No Criteria for Unethical Practice	Importance to Other Disciplines	Lack of Guidance - what after PG?	Varied Professional Charges	No Outline for Counselling Procedure or Documentation	limited training opportunity	Malpractices		THE LESS AWARE PEOPLE ARE, THE MORE DIFFICULTIES THEY WILL HAVE IN SEEKING HELP	Lack of Awareness
	Lack of Awareness	Malpractices	Lack of Guidance - Various Entrance exams for M.Phil. / Ph.D	Social Stigma	Malpractices	Need is realized by Govt. but Implementation,	Lack of Guidance for Sources to undertake Training		STANDARDIZATION OF PROCEDURE FOR DIAGNOSTIC ASSESSMENT AND THERAPIES	No Outline for Counselling Procedure or Documentation
			Lack of Awareness	Community has a need. If we don't provide manpower, do provide good service, they will develop their own way of training		Imbalance in the allocation of responsibilities	Malpractices		UNAPPROACHABLE OF SERVICES	UNBALANCED PATTERN OF TEST REPORTS
	Role of Psychological Association	RCI Process for Licensing	No System Country	RCI - Entrance Exam for M.Phil.	the way system works abroad	Govt. Attention to Promote Psychology		Govt. Attention to Promote Psychology		Promotion of Monitoring from Govt.
Professional Regulation in India	Purpose of Regulation	Role of Professional Regulation	Stigma	No System as there are in other countries	we have to create our own recognition in our field	Psychology is taken for granted - bhai, nai karna hai		Untrained Professionals		Attention of Non-Govt. Psychological Association for Standardization
	Students' Benefits	Awareness of Government	No Standards	Question on Trust from People due to lack of System	Govt. Attention to Promote Psychology	Govt. Attention to Promote Psychology				Standardization of Curriculum leads to Quality in Practice

Efforts of Eminent Professionals for the establishment of Professional Regulation	Govt. Attention to Promote Psychology	No Quality	Lack of Synchronization between Psychiatrists and Psychologists -	Awareness of People	Lack of uniformity in curriculum	Experts of Clinical Psychology wants to keep themselves preen at the top. There's no Defined Role of Other Psychologists in India"	lack of awareness	E.g. - School counsellor is mandatarly in schools. Similarly, in each organization the post of Psychologist can be made mandatory too	Support from Various Sectors like Health, Education, Corporate, Sports
	Role of Media to bring Awareness	Untrained Professionals	we think we are lesser than them	Counsellor - Psychologist - Defined Roles	Awareness to minimize Stigma				

Table 3.25 – Theme wise Coding

THEMES	1	2	3	4	5	6
SELECTION OF STUDENTS and SELECTION OF SPECIALIZATION	Apart from Merit, Aptitude Test for Psychology and Specialization	Students' Orientation and Their Experiences for Specialization in UG	Gradation of Specialization in India	Personality and Interest Test for Selection of Psychology as a Subject		
CURRICULUM OF PSYCHOLOGY IN POSTGRADUATION	Uniformity in Curriculum	Link between Teaching of Psychology and Practice	Need of Practical Experience and Supervised Training in PG	Curriculum Update - (as per International Standards)	Equal Importance to Theory and Practice	Importance of Research

	Books in Indian Context	Curriculum Development - Taking inputs from practicing psychology professionals				
CHALLENGES IN PSYCHOLOGICAL PRACTICE	Mental Health Awareness	Malpractices	No Centralized System	Need of Training in PG	No outline for Counseling Procedure for Documentation	Social Stigma
	Trained Professionals Migration due to Lack of System	Lack of Man Power as per Population	RCI role in Psychology	Influence of Psychiatrist over CP	Lack of Guidance regarding Entrance Exams for M.Phil./Ph.D. in PG	
	THE LESS AWARE PEOPLE ARE, THE MORE DIFFICULTIES THEY WILL HAVE IN SEEKINGHELP	COMMUNITY HAS A NEED. IF WE DON'T PROVIDE MANPOWER, DO PROVIDE GOOD SERVICE, THEY WILL DEVELOP THEIR OWN WAY OF DEALING WITH THE PROBLEM				
PROFESSIONAL REGULATION	Attention of Non. Govt. Psychological Associations	Attention of Government to Streamline Psychology	Social Stigma / Question on Reliability of Services due to absence of regulatory body	Lack of Awareness to seek for help from Society	RCI - Rules and Procedure for Licensing	Lack of Uniformity in Curriculum in PG

	Untrained Psychological Professionals	How regulatory body work in other countries?	Regulation is Root of the system- due to which tree of psychology profession - from selection to training and practice - can be strengthen			Experts of Clinical psychology wants to keep themselves preen at the top.No defined role for other psychologists in India.
		Support from various sectors such as health, education, corporate, NGOs and sports.E.g. - School counselor is mandatory in schools. Similar in each organization the post of psychologist can be mandatory too				

As mentioned in table 3.24 and table 3.25, interviews with practitioners regarding existing scenario of Psychology in India in terms of selection of students in Postgraduation, selection of specialization in Postgraduation, challenges faced by practitioners in teaching and practicing and need of regulatory body and streamlining psychology as a profession in India were discussed. Each theme wise description is explained below.

“Psychology Profession in India, needs Attention”

OBJECTIVE 1 - Selection of Students and Selection of Specialization at Post-Graduate Level

With this objective, practitioners were asked about their opinion regarding selecting students for Postgraduation in Psychology. Selection of students with required knowledge, interest and aptitude for any field is a primary factor to strengthen the quality of any discipline. Therefore, disciplines like, military services, civil services, medicines, business administration and sports, candidates were examined whether they have required knowledge and abilities which is crucial for the respective discipline.

Theme 1 – Use of Aptitude Test in selection and specialization.

Out of ten practitioners, most of the practitioners expressed their view regarding selection of students and post-graduate level and also procedure for giving specialization to students. It was found that most of the universities in India select students on merit basis primarily for Postgraduation in psychology. When asked how selection needs to be done, practitioners said that aptitude test need to be implemented for the selection, so that what students have gained during graduation cannot only be derived on the basis of merit but also aptitude test can show whether they have aptitude to make career in the profession or not.

Similarly, it was found that specializations such as, clinical psychology, counselling psychology, educational psychology, industrial psychology, developmental psychology, criminal psychology, are given to students at Postgraduation level on the basis on merit. Practitioners shared their opinions that merit-based choice for specialization is going on in many disciplines. For example, in engineering also, specializations are given on the basis of merit only. Similarly, in psychology, universities and colleges where specializations are offered, follow merit-based approach for the allotment of specialization. With this merit-based procedure, students who have

aptitude and skills to deal with diagnostics and clinical assessment, but with less marks than what is required, are not given a choice to choose clinical psychology. In such circumstances, quality of psychological practices – teaching, clinical and academic counselling, therapeutic procedures and research were compromised.

“Here, Students in Postgraduation are pushed to select Specialization”

One practitioner said that at university level specialization in Postgraduation has become stereotypical in terms of teaching and practicing. Clinical psychologists are found to feel superior than psychologists from other disciplines such as educational, counselling, developmental, industrial and social. In fact, it was observed that after the completion of Postgraduation, they are the one who are applying for jobs in schools and companies.

During discussion of challenges regarding specialization in Postgraduation, one practitioner posted on a psychology forum, *“We study educational psychology for two years. And when there is a vacancy in school, students from clinical and counselling psychology, are also apply for the same post. So, where will we work? what should we do?”* Hence, due to lack of standardization of definition of psychologists and lack of guidelines for specialization, no other criteria are measured. Besides, in universities, the specialization of clinical psychology is given on merit basis, which means, students who had higher grades or percentage, will get the clinical psychology as specialization in Postgraduation. Now, there are more possibilities of these students of getting higher percentage or grades in Postgraduation which is why, they get more opportunities when apply for work. Besides, after finishing Postgraduation in clinical psychology, students apply everywhere from school, NGOs and organizations, where there is a need of professional from counseling psychology, educational psychology or industrial psychology. To strengthen any discipline, quality education is believed to be fundamental root. Unlikely, in medicine it seems standardization is very clear and it is being followed strictly by the medical professionals and hospitals.

Theme 2 – Students’ Orientation and Experiences during Graduation.

When asked about the selection of students and selection of specialization for psychology in Postgraduation, practitioners suggested that during graduation, if students are oriented with types of disciplines along with scopes of job opportunities in India and they were exposed to

workplace situations, choosing specialization would not be difficult for them keeping in mind what and where they want to build their career.

Objective 2 - Curriculum of Psychology in Postgraduation

Practitioners were asked about how curriculum is important to strengthen the psychology profession in India. What is the role of curriculum to streamline the discipline of psychology? Several important issues regarding curriculum development were discussed with practitioner and their views are elaborated in this section.

Theme 1 – Uniformity of Curriculum

All the practitioners were asked whether there was a need for uniformity of curriculum. Nine out of ten practitioners agreed upon the need of common curriculum across the country.

“Uniformity Will Give Good Picture About the Individual and the University and Everybody Will Be Measured at Equal Level”

It was noted from the conversation with practitioners that uniform curriculum of psychology in the country can lead to quality practice and standardization of profession in terms of role of psychologist in various specializations, ethical guidelines for practicing psychologist and various rules and regulation a psychology professional needs to follow in their work. This whole lens should be taken in to consideration from the medicine discipline where there is a uniform curriculum across the country. In existing scenario, United Grant Commission (UGC) has provided a model curriculum for psychology, but then at university level, it is modified as per their convenience and facilities. It was also shared that uniform curriculum can also be useful in the assessment of competitive examinations such as, an entrance examination for M.Phil. or Ph.D., National Eligibility Test (NET), State Level Eligibility Test (SLET), State Public Service Commissions and Union Public Service Commission (UPSC).

Theme 2 – Absence of Bridge between Teaching and Practice.

When practitioners were asked about their thoughts regarding curriculum development, absence of bridge between teaching of psychology and practice was second most repeated concern by most of the practitioners. It was derived from the conversation with practitioners that there is an

absence of bridge between what is taught in Postgraduation and what is actually needed to practice.

“Professionals who are practicing should be in the committee for curriculum development”

It was shared that curriculum of psychology need to be equipped with both theoretical subjects and subjects with practical exposure such as, supervised counselling sessions, psychological assessment, therapeutic assessment and so on. As observed in UGC curriculum, only few university have developed their curriculum in such a manner. One practitioner shared that theoretical subjects enhance their comprehension of information regarding the subject and also equipped them to acquire the require knowledge and abilities. Inclusion of subjects with practical exposure to situation and environment leads to good amalgamation to become a learned individual.

In today's scenario, in major universities students are taught regular subjects such as clinical psychology, counselling psychology, educational psychology, industrial psychology, personality theories and research methods. When it comes to practice, there are various psychological therapies, psychological assessment and software applications available which can be helpful for students to acquire knowledge, skills and abilities. Hence, after the completion of Postgraduation, students have to look for resources to acquire above mentioned criterion by enrolling themselves in workshops and certified courses.

Theme 3 - Need of practical experiences and supervised training in Postgraduation.

From the reflections of practitioners, it was found that students in postgraduation need practical experience in the area where they are willing to build their career. It was reflected in responses of practitioners that students who are pursuing to practice psychology in clinical and counseling settings, they have been given similar practical exposure during postgraduation and students who wants build career in research and development, they can be given exposure in research institutions and projects of social and human development. And if somebody is interested to pursue career in to research or teaching, then he/she should be given that kind of exposure. Hence, equal importance to theory and practice in the needed area is needed in the curriculum at post-graduate level. As per the guidelines of UGC model curriculum theory and

practical subject ratio need to be 70% - 30%, whereas in majority of universities, it is 85% - 15%.

Objective 3 – Challenges in Psychology Practices

Since the inception of psychology in India in 1950, mental health has not been given importance as physical health. Since, then psychology professionals have been struggling for the identification and equal importance of psychology in India. In this study, both quantitative and qualitative part of questions, practitioners were asked about the number of challenges they face in the psychological services. Few common issues are explained below.

Theme 1 – Awareness of Seeking Help among People.



Figure 3.1 – The nucleus of Mental health awareness.

As shown in the figure 3.1, the essence of strengthening psychological services through factors such as pedagogy of psychology, standardization of the term ‘psychologist’, professional regulation of the profession and training needs are connected to mental health awareness. From the conversations with practitioners about existing scenario of psychology in India, challenges faced by practitioners and need of professional regulation for psychology professionals, it was derived that mental health awareness is the biggest challenge for psychology professionals that

exist in the country. India is a country with hundreds of languages and thousands of culture and different religions and castes. People are hardwired to go to their religious places and gurus when faces troubles with their life and their choices. Besides, stigma of being labeled as '*pagal*' or '*psycho*' is very common in the country. Some rays of hope were seen when school counselor was made mandatory in CBSE schools. Then it is also believed that the need of psychologist is till school education only. Very few higher educational institutes, colleges and universities have provision of psychological services to students. Very few hospitals have recruited psychologists. At corporate level, the role of psychologists has been surpassed by human resources, coaching and training. Psychology is just a one unit of the curriculum of human resources in corporate sectors. It was reflected from the opinion of practitioners that mental health awareness programs at every level of society and each area of work need to be done. The role of government is also thought to be essential for mental health awareness.

Theme 2 – Malpractices

As mentioned in objectives of National Academy of Psychology (NAOP), promotion of growth of psychology and promotion of highest standards of psychological measurement, testing and instrumentation. It is revealed that no government or non-government psychological association has taken an initiative of monitoring and supervision of psychological practices facilitated by professionals to semi-professionals to amateurs. Unlike, Medical Council of India, psychological practices such as clinical counselling, psychotherapies, psychological assessment through various psychological tests, counselling of students, parents, teachers, couples, patients, professionals and special children needs to be monitored and confirmed that these services are being given by some responsible professionals who must acquire certain educational qualification and certification for certain skills and abilities. In the absence of such monitoring and supervising body, there are non-qualified and untrained people who have started working in psychology profession.

As seems logical, professionals opinioned that any service can be labeled as malpractice or unethical only if there is certain criterion under which psychology can be practiced.

Theme 3 – No Standardization of the terms, ‘Psychologist’ or ‘Counsellor’

Dalal (2002) stated that psychology as an academic discipline was established in Calcutta university in the beginning of 19th century. Over the years, the profession has seen much professional growth in the various disciplines such as, healthcare, education, corporate, sports and defense services. In the interviews with psychology professionals, it was derived that the definition of psychologist is still ambiguous in the country. It is commonly believed that those who have done Postgraduation in Psychology in Arts or Science stream, can themselves psychologist as per their specialization such as, Clinical Psychology, Counselling Psychology, Educational Psychology, Industrial Psychology, etc. Rehabilitation Council of India (RCI) gives certification to Clinical Psychologist only if the students have studied from RCI recognized institutes.

According to an article published in Times on India on May 4, 2016, the doctor – population ratio, according to Medical Council of India (MCI) in the country stands at 1:1681, based on the assumption that 80 % of total doctors are available on any given day. In case of Psychology, due to lack of government regulatory body, no database is developed for the number of psychologists in India. Though, according to an article published on National Survey on Mental health disorders in India in Daily News and Analysis (DNA) on June 16, 2013, there are only about 4000 psychiatrists, 1000 psychologists and 3000 social workers for the 1.34 billion population of the country.

Theme 4 – Need of Training in Postgraduation.

Graduation, Postgraduation and Doctoral Level Psychology is taught in Arts as well Science stream. Psychology is an applied discipline where psychological practices in the specializations such clinical, educational, industrial and developmental are needed. When students finish their masters, it is expected that they are taught and equipped with certain skills and abilities to work in the field. It was derived from the interviews as well through curriculum of 34 universities that no practical training is given in most of the universities. RCI registered institutes provides clinical training experience in hospital for mental health. Due to lack of training during Postgraduation leads to compromise in quality in psychological services. Only after Postgraduation students seek to learn skills and abilities required for psychological services.

Theme 5 – No outline for Documentation of Counselling Procedure

American Psychological Association (APA, 2002b) states that the nature and extent of the record or documentation vary as per the purpose, setting and context the psychological services. Documentation of counselling sessions benefit both client and psychologist through treatment plans, services provided and clients' progress. Documentation is also a concern shown when practitioners were asked about how quality of psychological services could be strengthening. It was noted in the comments of interviews that documenting the records of sessions is not practiced in India by most psychology professionals. Due to absence of any recommendation by Govt. / Non – Govt. body, practitioners have developed record keeping or documentation as per their own convenience. There is no standardized practice

Theme 6 – Social Stigma

Stigma has been argued to be a major determinant of outcome of severe mental illness across cultures in India. A study conducted by Raguram (2004) reported that stigma about seeking mental illness impact negatively on work, finances and social interactions. The study also reported concerns about the social impact of the illness on the affected person, with difficulties in marriage, social devaluation and avoidance by society. In India, lack of awareness regarding seeking help in mental illness is a prominent factor which plays major role in social stigma.

Supreme Court of India and Ministry of Human Resource Development, Government of India (MHRD- GoI) constituted a committee, which stated the deployment of counsellors in secondary and senior secondary schools. It also mandated arrangement of specified number of regular and periodic psychological counselling sessions per year for every student till they finish school with involvement of parents and teachers during the whole practice. Government has taken such initiative to provide psychological services to all school children. Similarly, if such laws and regulations are implemented in other work disciplines such as, health, manufacturing, corporate, Information Technology.

Theme 7 – Migration of Trained Professionals

This issue was shared by two of eminent psychologists in India during the interviews. They expressed that because of the absence of professional regulation and lack of attention for

psychology by the Government, many clinical psychologists preferred to migrate abroad for practice after completion of their M.Phil. or Doctoral study. The psychology profession is reputed and in demand in countries like Australia, New Zealand, USA, Canada and Nordic countries. According to a presentation in BBC news, psychology profession is in top 20 most wanted professions of the world (BBC, 2013).

Theme 8 – Role of RCI

The Rehabilitation Council of India (RCI) was set up as a registered society in 1986. On September, 1992 the RCI Act was enacted by Parliament and it became a Statutory Body on 22 June 1993. The primary objectives of RCI is to regulate the training policies and programmes in the field of rehabilitation of persons with disabilities and to bring about standardization of training courses for professionals dealing with persons with disabilities. RCI, however can provide license only to those who have studied degree, diploma and certificate courses from RCI recognized institutions and universities across India. Central Rehabilitation Register accepts registration under the categories such as, clinical psychologists, audio and speech therapists, rehabilitation psychologists and rehabilitation social workers. There are no norms or guidelines for any disciplines of psychology (M.A/ M.Sc.) which is taught in state and central universities. Moreover, clinical psychology is only considered under for RCI registration only if the individual has studied from RCI recognized institutes.

Theme 9 – Influence of Psychiatrist Over Clinical Psychologists

Though psychology was introduced in 1950, psychologists in India are still looking for recognition for psychological practices. Singh, S and Singh, A (2006) explained this relationship as like modern marriage. Can't do without it, can't get out of it. It was also labeled as separation with mutual consent. Psychiatrists are dealing with mental disorder on clinical level and psychological level, but it was found a layer of apprehensiveness to consult the opinion of clinical psychologist whenever needs. Clinical psychologists found them over-reacting and aggressive when confronted in some circumstances. However, both psychiatrist and clinical psychologist have realized that attitude of ignorance for mental health movement at large. One rationale for this attitude of psychiatrist was derived that they were exposed to similar treatment from their seniors and medical colleagues. Clinical psychologists were also found either

protectively aggressive towards psychiatrist or meekly submissive. Psychiatrists' way of neglecting psychosocial treatments and favoring biological creates the exasperation in clinical psychologists.

Objective IV – Professional Regulation

Theme 1 – Attention of Government to Streamline Psychology

Since the inception in 1950, psychology as a profession is still searching for recognition in society. It was derived from the perspectives of psychology professionals that lack of regulatory body by government is major roadblock to streamline the profession. Rehabilitation council of India (RCI) was established in 1986 and was responsible for monitoring and supervision of mental health services in India. Psychological practices have been practiced in different aspects such as clinical, educational, organizational and developmental settings. RCI is limited to monitor rehabilitation and clinical practices of psychology professionals. Several institutes in India are affiliated with RCI and running certificate and degree courses which gives a license to practice in the areas of rehabilitation psychology, clinical psychology and psychiatric social work. Except, RCI, there is no other regulatory body to monitor and supervise other areas of psychology, which actually covers major part of mental health related issues.

Theme 2 – Attention of Non - Government Psychological Association

Psychological associations such as, National Academy of Psychology (NAOP), Indian Association of Clinical Psychology(IACP) and Indian Association of Applied Psychology (IAAP) are most active in organizing annual conferences and giving memberships to psychology professionals of India. When it comes to monitoring of psychological services, there is no direct initiative from them. Associations claimed that their aim is to promote quality of teaching and training for research in psychology and to foster the growth of psychology as a profession in India. Some associations have constructed ethical guidelines for psychology professionals and kept on the website. It is also important to monitor whether ethical guidelines have been taken sincerely by the members.

It was also discussed in *Mental Health Policy Group* that such psychological associations need to take responsibility for monitoring of psychological services by establishing committee.

Theme 3 – Reliability of Psychological Services

The growth and development of psychology as a profession in India is based on the quality of psychological services practiced by psychology professionals. Psychological services include teaching and psychological and clinical counselling and assessments. Due to lack of regulatory body which can monitor whether the appropriate psychological services are practiced or not. The root of quality psychological services lies in the academics as perceived by practitioners. They said that the pedagogy of psychology need to restructured from practical and application perspective at university level. For the scrutiny of psychological practices, there is a serious need of regulatory body like medicine has in India. In the absence of supervision and monitoring by any legal system, malpractices have been increased.

3.3.2 - Section II – Critical Review of Curriculum of Psychology in Postgraduation

To understand the gap between the UGC model curriculum / guidelines and existing curriculum at post-graduate level in the universities in India, different data were collected from the official websites of each university. Total 33 curriculums have been collected from 33 state and central universities of India. One of the limitation of the review was that some universities have not put the curriculum of Postgraduation on their website.

Table 3.26 - List of subjects included in psychology curriculum at post-graduate level

	Unive rsity	NA AC Gra de	Ye ar	Annu al / Seme ster	Subjects	Subjects	Subjects	Subjects	Subjects	Subjects	Subjects	Subjects	Subjects	Subjects	
1	Andhra University	A	2013-14	Semester	Principles of Psychology	Life Span Developm ental Psychology	Physiologic al Psychology	Research Methodolo gy	Personality and Adjustment	Cognitive Psychology	Psychopat hology	Clinical Psycholo gy	Project	Human Resource Managemen t	Peace Psychology
					Psychologi cal Testing	Psychologi cal Testing (Practical)	Cognitive Psychology (Practical)	Social Psychology	Organizatio nal Behavior	Counseling Psychology	Health Psycholog y	Psycholo gical Assessm ent			
2	Banaras Hindu University	A		Semester	Attention and Perceptual Processes	Research Methods and Exp. Designs	Advanced Physiologic al Psychology	Applied Social Psychology	Practical	Language, Memory and Thinking	Non- experime ntal and Correlatio nal Methods	HRM	Psychology of Adolescents	Rehabilitatio n Psychology	Cross Cultural Psychology
					Psychobiol ogy	Cross- cultural Psychology	Practical	Therapeuti c Technique	Neuro Psychology	Personality	Organizati onal Developm ent	Psycholo gy of Adulthoo d and Aging	Organizational Communication	Sports Psychology	Psychology of Rehabilitation
					Practical	Compre hensive Viva	Health Psychology/ Human Factors	Drugs and Behaviour	Counseling						
3	Banasthali University	A		Semester	Cognitive Psychology	Psychopat hology	Theories of Personality	Research Methods and Statistics	Community Psychology	Environme ntal Psychology	Positive Psycholog y	Social Science	Organizational Behavior	Sports Psychology	Gerontology
					Clinical Psychology	Counseling Psychology	Health Psychology								

4	Bharathiar University	A	2011	Semester	Psychometry and Research Methodology	Health Psychology	Organizational Behavior	Cognitive Psychology	Experimental Psychology	Advanced Social Psychology	Personality Research and Applications	Educational Psychology	Sports Psychology	Group Dynamics for Social Living	Consumer Psychology
					HRM	Theories of Motivation and Emotions	Theories of Counseling	Experimental Psychology	Project Work / Practical						
5	Dr. Bhimrao Ambedkar University	A	2013-14	Semester	Experimental Psychology	Statistical Methods	Social Psychology	Indian and Western Contribution to Psychology	Experimental Psychology II	Psychopathology	Psychometry	Physiology	Research Designs and Statistics	Theories of Personality	Psychology of Current Trends in Social Issues
					Organizational Psychology	Clinical Psychology	Educational Psychology	Advanced Statistics and Exp. Design	Man, at Work: Assessment and Training	Psychodiagnostics	Forensic Psychology	Group Processes	Educational Psychology II	Man, at Work: Satisfaction, Motivation and Performance	Viva
					Psychotherapy and Counseling	Advanced Educational Psychology	Developmental Psychology	Guidance and Counseling	Dissertation						
6	Gulbarga University	B		Semester	Systems of Psychology	Physiological Psychology	Research Methodology	Social Psychology	Cognitive Psychology	Psychological Statistics	Theories of Motivation and Personality	Principles of Psychological Measurements	Practical	Child Development	Counseling Psychology
					Psychopathology and Mental Hygiene	Health Psychology	Clinical Assessment	Block Placement	HRM	Clinical Psychology	OB	Fieldwork	Dissertation		
7	Jamia Millia Islamia	A	2013-15	Semester	Cognitive Psychology	Research Methods	Social Psychology	Psychometrics	Psychological Testing	Psychopathology	Organizational Behaviour	Dissertation	OB	C. Advanced Social Psychology	C. Consumer Psychology

8	Jawahar Nehru University	A	Semester	Statistics in Psychology	Peace Psychology	Psychological Experiments	Health Psychology	Positive Psychology	Intervention in Counseling	HRM	Psychotherapy				
				Theories and Systems	Experimental Psychology	Social Psychology	Research Methods and Statistics	Cognitive Psychology	Practical	Psychopathology and Clinical Psychology	Organizational Psychology	Principles and Applications of Guidance	Human Development	Psychometrics	
				Personality	Physiological Psychology	Psychological Testing									
9	Jiwaji University	A	Semester	2008-09	Cognitive Processes	Research Methods and Statistics	Psychopathology	Life Span Development	Psychology of Personality	SoCal Psychology	Educational Psychology	Clinical Psychology			
10	Karnatak State Open University	A	Annual		Systems and Contemporary Trends in Psychology	Biological and Social foundations of Behaviour	Cognitive Processes	Motivation and Emotions	Personality and Adjustment	B. Advanced Skills and Processes of Counseling and Psychotherapy	B. Consultation-Liaison Psychology				
11	Kolkata University	A	Semester	2013-15	O. Training and Development										
12	Kurukshetra University	A	Semester	2002-03	Experimental Psychology	Social Psychology	Research Methodology	Practical	Cognitive Psychology	Practical	N. Sports Psychology				
13	Madras University	A	Semester		Advanced General Psychology	Advanced Social Psychology	Life Span Psychology	Research Methodology	Psychological Testing	Organizational Behaviour	Consumer Behavior	HRM	Counseling and Behavior Modification	Health Psychology	Group and Team Effectiveness in Organizations

14	Madurai Kamraj University A	2013	Annual	I. Organizational Development	General Psychology	Life Span Development	Social Psychology	Research Methodology	Experiential Psychology - Practical	Psychopathology and Mental Hygiene	Environmental Psychology	Counseling Psychology	HRM	Project Work	
15	Maharshi Dayanand University A	2014-15	Semester		History of Psychology	Experiential Psychology	Physiological Psychology	Research Methods and Statistics	Practical	Theories of Psychology	Cognitive Psychology	Developmental Psychology	Practical	Guidance and Counseling	Consumer Psychology
					Personality	Bio-Psychology	Research Designs and Statistics	Practical	Psychological Testing	Foundations of Clinical Psychology	Social Psychology	Neuro Psychology	Health Psychology	Child Psychology	G. Child Emotional and Behavioral Problems and Interventions
					Practical	Psychometrics	Clinical Intervention	Applied Social Psychology	Neuro Psycho Rehabilitation	G. Gender and Psychology	Industrial Psychology	Positive Psychology	Management of Health and Illness	HRM	Peace and Harmony
16	Mahatma Gandhi University A	2011	Semester		Cognitive Psychology	Personality and Personal Development	Positive Psychology	Testing and Measurement in Psychology	Psychological Assessment - Practical	Psychology of Intelligence, Learning and Motivation	Health Psychology	Clinical Psychology	Community Psy/Clinical Psy/OB/Criminology/ Fundamentals of Sports and Exercise	Contemporary Issues and role of Psychology in Social Engineering	Cross Cultural Psychology
					Research Methodology	Psychodiagnosics - Practical	Principles of Neuropsychology	Cognitive and Behavior Oriented Therapies	Counseling	Psychology of Differently Abled / Counseling in School Settings	HRM / Consumer Behavior and Advertisement Psychology	Forensic Psychology	Principles of Sports Behavior	Internship	Dissertation

17	Mizoram University	A	Semester	Cognitive Psychology	Research Methodology	Applied Social Psychology	Practical	Learning and Memory	Statistics and Psychometrics	Advanced Physiological Psychology	Practical	Stress, Emotions, Coping and Health	Psychodiagnosics	Practical	
				Personality Theories	Practical	Clinical Psychology	Adult Psychopathology	Neuropsychology	Dissertation						
18	Mumbai University	A	2013-14	Semester	Personality Psychology	Cognitive Neuropsychology	Statistics	Experimental Psychology	Evolutionary Psychology	Intervention Systems in Psychology	Research Methodology in Psychology	Practical (Psychological Assessment)	Counseling across life span	Organizational Behaviour	Multiculturalism
					CBT, REBT and Group Therapy	Psychological Assessment: Application Report writing	Clinical Psychopathology	Constructing Social Psychology	Positive Psychology	Advanced Applied Psychometrics	Change Management				
19	Osmania University	A	CBCS	Statistics	Social Psychology	Cognitive Psychology	Personality Theories and Assessment	Experimental Psychology - Practical	Exp. Designs in Psychology	Development Across Life Span	Psychological Testing	Psychological Testing - Practical	Understanding Basic Psychological Processes	Health Psychology	
				Experimental Psychology - Practical	Abnormal Psychology	Organizational Behavior	Fundamentals of Counselling	HRM	Counseling Skills and Practical	Seminar	Applied Psychology for Health				
20	Punjab University	A	Semester	Theories and Systems	Social Psychology	Experimental and Cognitive Psychology	Research Methodology	Social Psychology	Practical	Organizational Behaviour	Child Psychology	Practical	Behavior Economics	Parapsychology	
				Clinical Psychology : Psychodiagnosics	Counseling Psychology	Sports Psychology	Positive Psychology	Health Psychology	Media Psychology						

21	Rajasthan University	A	2015 - 17	Annual	Systems and Theories of Psychology	Cognitive Psychology	Physiological Psychology	Statistics and Research Methods	Practical/ Experiments	Applications of Psychology	Social Psychology	Fundamental of Clinical Psychology	Population Psychology	Organizational Psychology	Vocational Psychology
					Personality Theories	Thesis	Guidance and Counseling	Industrial Psychology	Ecological Psychology						
22	Rashtrasant Tukdoji Maharaj Naagar	A		Semester	Cognitive Psychology	Research Methods	Personality Theories	Advanced Social Psychology	Practical	Advanced General Psychology	Research Designs	Personality Theories II	Health Psychology	Practical (Clinical Psychology)	Management of Personnel HR
					Issues in Social Behavior	Practical	Abnormal Psychology	Psychodiagnostics	Counseling and Psychotherapy	Family and Couples Therapy	Consumer Behaviour	Industrial Psychology Practical	Guidance and Counseling	Education and Career Guidance	Assessment in Counseling
					OB	Child Assessment	Therapeutic Interventions	Community Mental Health and Medical Psychology	Clinical Psychology Practical	OD	Leadership in Communication	OC, Learning and Change	Employee Counseling	Practical	Psychological Testing
					PsyTesting in Guidance N Counseling	Psychology Disorder	Intervention Strategies in Counseling	Special Areas of Counseling	Basic Counseling Skills	Counseling Psychology Practical	Psychopathology				
23	Ravenshaw University	A		Semester	Human Cognition and Mind	Theoretical System in Psychology	Research Methods I	Statistics I	Practical Works	Cognitive Psychology	Theoretical System in Psychology II	Research Methods II	Health Psychology	Dissertation	Seminar Paper

24	Sambalpur University	B+	2014-15	Annual	Statistics II	Practical Works	Applied Social Psychology	Counseling Psychology	Applied Social Psychology	L. Personnel Psychology	Personality Disorders: Theory, assessment, and Interventions				
					General Psychology	Abnormal Psychology	Practical (Experiments)	Educational Psychology	Statistics	Practical	Guidance and Counseling				
					Developmental Psychology	Social Psychology	Industrial Psychology	Practical							
25	Saurashtra University	A	2005	Semester	Advanced Experimental Psychology	Research Methodology	Developmental Social Psychology	Health Psychology	Psychology of Emotion - I	Perspectives of Human Behavior	Advanced Industrial Psychology	Environmental Psychology	Dissertation	Social psychology and Praxis	Rehabilitation Psychology
					Practical	Statistics in Psychology	Psychological Measurement and Scaling	Organizational Psychology	Neuro Psychology/ Psychodiagnostics/ Models of Psychopathology	Psychodiagnostics Testing	Stress Management				
26	Shivaji University	A	2013-14	Semester	Research Methods in Psychology	Applied Cognitive Psychology	Personality Psychology	Practical (Experiments)	Statistics	Health Psychology	Positive Psychology	Practical (Psychological Assessment)			
27	SNDT Women's University	A		Semester	Cognitive Processes	Research Methodology	Psychological Testing	Psychological Testing - Practical	Theories of Personality	Environmental Psychology	Neuro-cognition	Applications of Statistics in Psychology	Counseling Psychology- Intervention Strategies/ Internship/ Dissertation	Career Counselling and World of Work	Environmental Psychology

A

Semester

Practical	Applied Social Psychology	Positive Psychology	Cross-cultural Psychology	Clinical Psychology - Psychopathology	OB	Psychology of Adjustment	Psychotherapy and Counseling	Industrial Psychology - Employee Counseling	Practical (Clinical Psychology)	Dissertation
Psychodiagnosics	Practical	HRM	OC and Development	Occupational Health and Safety	Psychology of Adjustment	Assessment in Counseling	Internship			
Essential of Psychology	Theories of Psychology	Life Span Development	Statistics in Psychology	Practical I	Practical III	Seminars	Cognitive Psychology	Positive Psychology	OB	Workplace Counseling

Psychopathology	Research Methodology	Therapeutic Psychology	Psychological Counseling Skills	Techniques of Counseling	Internship	Dissertation	Counseling in Diverse Settings	HRM		
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B

Semester

Theories and Systems	Psychophysics and Psychometrics	Perceptual and Motor Processes	Personality	Understanding Individual in an Organization	Fundamentals of Educational Psychology	Clinical Psychology	Org. Theory, Structure and Design	Foundations of Behavioral Problems	Psychology of Personality and Adjustment	Org. Development
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Placements	Health Psychology	Experimental Design	Learning, Motivation and Thinking	Individual and Group Behavior	Adv. Industrial Psychology and OB	Counseling Skills	Education of Exceptional Children	Memory and Thinking	Exp. Psychology - Practical	Applied Social Psychology
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Psy. Testing	Env. Psychology	Dissertation	Social Psychology	Human Resource Development	Approaches to Counseling	Adv. Educational Administration	Analysis of Research and Scientific Writing	Psycholinguistic and Consciousness		
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30	University of Jammu	A	2011-12	Semester	Experimental Psychology	HISTORICAL ISSUES AND SYSTEMS OF PSYCHOLOGY	STATISTICAL FOUNDATIONS OF PSYCHOLOGICAL RESEARCH	PSYCHOLOGY PRACTICUM-I	PSYCHOLOGY OF PERSONALITY	PHYSIOLOGICAL PSYCHOLOGY	RESEARCH METHODS IN PSYCHOLOGY-II	COGNITIVE PSYCHOLOGY	FOUNDATIONS OF COGNITIVE PSYCHOLOGY	PSYCHOPATHOLOGY	
					ORGANIZATIONAL PSYCHOLOGY	ADVANCED SOCIAL PSYCHOLOGY	PSYCHOLOGY PRACTICUM-III	MODERN HEALTH PSYCHOLOGY	DEVELOPMENTAL PSYCHOLOGY	CLINICAL PSYCHOLOGY: ASSESSMENT AND DIAGNOSIS	FIELD TRAINING IN THE SPECIALIZED AREA: CLINICAL PSYCHOLOGY	COMMUNITY PSYCHOLOGY	COUNSELING AND PSYCHOTHERAPEUTIC TECHNIQUES		
31	University of Mysore	A	2013-14	Semester	Advanced Cognitive Psychology	Test Construction and Standardization	Basic Genetic, Evolution and Behavior	Childhood Pathology	Psychological Assessment	Organizational Behaviour	Human Resource Training and Management	Advanced Statistics	Adult Psychopathology	Animal Behavior	Psychology: Indian Perspectives
					Clinical Assessment	Human Behavior and Counseling at Work	Learning Theories	Perspectives in Personality	Social Evolution	Psychotherapy	OD	Research Preparation	Dissertation	Field work	
32	University of Pune	A	2013-14	Semester	Cognitive Processes	Psychological Testing	Statistics Method	Practical (Tests)	Learning and Memory	Psychological Testing: Applications	Research Methodology	Practical (Experiments)	J. Health psychology	J. Palliative Care and Counseling	
33	Utkal University	B++		Semester	Basic Psychological Processes	Life Span Developmental Psychology	Statistics and SPSS/ Clinical Psychology	Psychological testing	Research Methodology/ Counseling across	Social and Health Psy. / Applied Psy.	Educational Psychology	Testing and Seminar Presentation.	Internship, Dissertation/Term Paper	Behavior Therapy	Disaster Management/ Film Appreciation

Table 3.26 depicts the curriculum of psychology in Postgraduation in above mentioned universities. The curriculum of Psychology in Post-graduate level has been compared with the UGC Model Curriculum and also analyzed critically.

Weightage of Theory and Practical in the Curriculum

As per the UGC Model Curriculum recommendation, theoretical courses should carry a weight of 70-80% and practical courses between 20-30% such as laboratory work, field work, dissertation etc. It was found from the data consolidation of curriculum of different central and state universities, theoretical courses carry a weight of 85-90% and practical courses between 10–15% of the curriculum. There are also some universities found all the subjects are post-graduation consists of all theoretical subjects.

Lack of appropriate practical exposure affect the quality of education and also quality of psychology practice for students of Psychology.

Revision of Curriculum

It was found from the data consolidation that curriculum have been revised in average four years' span. The concern of revision of curriculum is not at university level, but the UGC Model Curriculum have not been revised or updated since 2001. The UGC Model Curriculum have been collected from the UGC website in recent time.

So, it is revealed that for fifteen years, the UGC has not taken any initiative for upgradation of the Model Curriculum. Psychology as a profession has been evolving drastically in the 21st century of globalization and digitalization. As per the development of the human life and important role of technology, mental health problems and needs are also increasing rapidly in no time.

Relevance to Psychological Practice

To strengthen Psychology profession in India requires quality of psychology practices in terms of education and training of psychology professionals, research and psychological practice. The concern about the relevance in the UGC Model curriculum is that all the courses elected by most of the universities are similar and subjects such as, Neuropsychology, Cross-cultural Psychology, Psychology of Sports, Behavior Modification, Cognitive Psychology and Artificial Intelligence, Psycho-Neuro Immunology, Advanced Physiological Psychology, Ethology and Comparative Psychology, Social Evolution and Peace, Conflict and International Relations have not been included in the curriculum.

Relevance to Indian Context

Since the beginning, when Psychology was introduced in India in Calcutta and Mysore, theories and concepts of Experimental Psychology and Psychotherapies were adopted and influenced from Western worldviews and psychological theories, similarly in the UGC Model Curriculum, one of the subject is Indigenous Psychology which is about understanding psychological theories and concepts in Indian context and scriptures, have been included but none university have included in their curriculum.

From the references books in each subject syllabus, it can also be observed that teaching of psychology – Clinical Psychology, Industrial Psychology, Educational Psychology, Developmental Psychology and Counseling Psychology are based upon the books of Western theories and concepts.

3.3.3 - SECTION III – This section presents the review of various psychological associations and programs for professional development of psychologists around the world.

Table 3.27 – Psychological Associations and programs from different country.

No.	COUNTRY	NAME	CONTENT 1	CONTENT 2	CONTENT 3	CONTENT 4	CONTENT 5	CONTENT 6
1	UK	Health and Care Professions Council	Work based learning.	Professional activity.	Formal / Educational.	Self-directed learning.		
2	Australia	Psychology Board of Australia	- conducting or attending - psychology workshops, seminars, - lectures or courses of study;	- writing, assessing or reading and analyzing: - peer review psychology journal articles, - scholarly professional books and monographs, or research proposals and grants	- producing, reviewing or viewing and analyzing - professional videos, audios, internet resources or scientific posters;	providing peer consultation to other psychologists		
3	Canada	Canada Psychological Association	Programme Content	Faculty and Institutional Personnel	Program Evaluation	Administration		
4	Europe	European Federation of Psychologist's Association	Goal Specification - Need Analysis, - Goal Setting	Assessment - Individual Assessment, - Group Assessment, Organizational Assessment, - Situational Assessment	Development - Service or Product definition - Requirement Analysis, - Service and Product Design,	Intervention - Planning, Perion Directed Orientation - Situation Directed Orientation, - Indirect Intervention - S n P Implementation	Evaluation - Planning, Measurement - Analysis	Communication - Give Feedback, Report Writing

5	New Zealand	The New Zealand Psychological Society	<ul style="list-style-type: none"> - Discipline, - Knowledge, Scholarship - Research 	Diversity and Culture	<ul style="list-style-type: none"> - S and P Testing, - S and P Evaluation 				
6	Singapore	Singapore Psychological Society	There are 3 categories of PD activity and the PD hours can include hours from any of these 3 categories per cycle	<ul style="list-style-type: none"> - Workshops - Professional Courses - Symposia / Lecture, 					
7	United States and Canada	Association of State and Provincial Psychology Boards (ASPPB)	Scientific Orientation	Professional Practice Assessment, Intervention Consultation	Relational Competence Diversity Relationships	Professionalism Personal Competence, Reflective Practice)	Ethical Practice Applications of Ethical Codes, Applications of Law and Rules and Ethical Decision Making)	System Thinking Organization, Interdisciplinary Collaboration	

8	European Network of Organizational and Work Psychologists (ENOP)	Educational Objectives Orientation, Knowledge of explanatory theory, Knowledge of technological theory, Diagnostic skills, Intervention skills, Professional competences, Research competences	Curriculum Components Courses, Apprenticeship Research project	Didactic Methods - Knowledge Lecture, Audio-visual, Learning Environment, Demonstration	Didactic Methods - Skills Exercises, Computer Exercises, Assignments and Case Study			
9	United States	HSPEC - Health Service Primary	Science Related to the Biopsychosocial Approach, Research/ Evaluation)	Systems Leadership/ Administration, Interdisciplinary Systems Advocacy	Professionalism Professional Values and Attitudes Individual, Cultural and Disciplinary Diversity Ethics in PC, Reflective, Practice/Self-assessment/Self-care	Relational Interprofessionals in Building and Sustaining Relationships in PC	Application Practice Management Assessment Intervention Clinical Consultation	Education Teaching Supervision
10	United States	Joint Council on Professional Education in Psychology (JCPEP)	Foundational knowledge competencies	Research Competencies	Practice competencies at the doctoral and postdoctoral levels of education and training.			

11	United States	Council of Chairs of Training Councils (CCTC)	Graduate Training and Readiness for Practicum and, and	Practicum Training Readiness for Internship,	Internship Training	Readiness for Entry to Practice	Entry to Advanced Practice and Specialization	
12	United States and Canada	Examination for Professional Practice of Psychology (EPPP)	the biological, cognitive-affective, and social and multicultural bases of behavior.	Growth and Lifespan Development	Assessment and Diagnosis	Treatment, Intervention Prevention	Research Methods and Statistics	Ethical/Legal/ Professional Issues.
13	United States	National Register of Health Service Providers in Psychology (NRHSPP) and	Integrated Healthcare	Ethics and Legal Issues	Evidence-Based Practice	Areas of Expertise	Cultural Competence	Supervision
14	United States	Council of Credentialing Organizations in Professional Psychology (CCOPP)	Cube Model for Competency Development	Foundational Competencies - Self - Assessment - Reflective Practice - Relationships - Scientific Knowledge - Ethical and Legal Standards - Individual and Cultural Diversity - Interdisciplinary Systems	Functional Competencies - Assessment - Diagnostics - Consultation - Research / Evaluation - Supervising / Teaching - Management / Administration			
15	UK	Competence Model for CBT	Generic Competencies (used in all psychological therapies)	Basic cognitive and behavioral therapy competences ()	Specific cognitive and behavioral therapy	Problem-specific competences		Metacompetencies overarching, higher-order competences

techniques (the core technical interventions)

which practitioners need to use to guide the implementation of any intervention

16

United States

National Association of School Psychologists (NASP)

Functional Domains

Data based decision making and accountability, Interpersonal Communication, Collaboration and Consultation, Effective Organization and Development of Cognitive/Academic Skills

Foundational Domains

- Diversity,
- Prevention
- Wellness promotion
- Crisis Promotion
- Research and Program Evaluation
- Legal, Ethical Practice and
- Professional Development

As mentioned by American Psychological Association (APA), Continuing Education (CE) and Professional development programs are tailored to the needs of practicing psychologists. It was found in previous studies that colleges and universities programs sometimes do not provide extensive range of learning experiences and training, which is sincerely required to become effective psychology professionals. Once student complete masters, get their degrees and are employed or start own psychological practice, they learn through experience. Due to lack of professional regulatory body for most of the psychology professionals except clinical psychologists, psychology practice without any supervision or monitoring is quite common in India. Present paper reviews and compare the various continuing education and professional development programs, being implemented by different psychological association in the world.

Table 3.27 show a list of 16 psychological associations around the world. It also shows the curriculum structured and implemented by various psychological associations. It was found from the data tabulation of curriculum of various psychological associations that CE and professional development programs have been implemented with the inclusion of different curriculum or course contents in a different manner. The researcher has highlighted some similar contents observed common in these psychological associations.

Academic areas such as writing papers, publications, teaching, journal clubs and peer review have been highlighted with orange color in the table 3.26. Learning related to legal and ethical rules and regulations, code of conduct related subjects has been highlighted with yellow color. Pink color represents the knowledge of audio-video resources, computer proficiency, exercises and assignments and case study. Green color depicts all importance of workshops, conferences, symposiums, research projects and lectures and blue color represent assessment and

evaluation of a psychology professional based on the specialization, interests and work area. Lastly, red color represents the research competency of an individual in professional development curriculum.

From the data comparisons of various psychological associations, objectives, their curriculum and also specific contents, it can be derived that, in each country, as per the policies and specializations, different psychological associations have their standardized ways of conducting continuing education and professional development program, where there are possibilities of becoming trained and certified psychology professional. Education of psychology and practice of psychology, both are positively correlated with each other, if quality of one increases, an immediate effect will be seen on other and vice versa.