**Course Work Structure:**

**Program: PhD Psychology**

**Course Code: PSY-701**

**Course: Title Quantitative Research Methods in Psychology Cr. Hr: 3**

 **Couse Description**

Academic research is a long journey that involves a series of challenging steps. These steps include selecting a research topic, reviewing the scholarly literature, devising a model, formulating and testing hypotheses and finally, presenting and interpreting the findings. The primary objective of this course is to help participants navigate the process of conducting empirical research in Psychology. It places emphasis on the diversity and richness of multiple research methods used in various directions of psychology. The course will highlight the promise and difficulties associated with original research methods. By the end of this course, participants will acquire a foundation from which to understand and apply research methods in their own research projects.

 **Expected learning outcomes include:**

 Developing an appreciation for the philosophical and theoretical basis of key research methods in psychology

1. Building up the abilities to inquire, think, and analyze methodological problems relevant to students’ specific interest and fields of study
2. Understanding the fundamentals of research design and methodology
3. Developing a familiarity with many of the practical dimensions of designing and implementing a research study
4. Becoming comfortable with well-established research methods as well as becoming knowledgeable of newer, and more original, methods, and of their respective strengths and areas of applicability.

 **Class Structure**

1. Lectures
2. Class activities
3. Class discussions
4. Readings
5. Critical Analyses
6. Seminar

**Course Contents**

|  |  |  |
| --- | --- | --- |
| **Week** | **Contents** | **Resources**  |
| **1st** | The Philosophy of Quantitative Methods  | Brian D. Haig: Chapter from Source Book  |
| **Assessment 1** | **Class Discussion: Pastand Contemporary Directions in Quantitative Research** |
| **2nd** | Quantitative Methods & Ethics  | Ralph L. Rosnow and Robert Rosenthal: Chapter from Source Book |
| **Assessment 2** | **Debate : Psychological methods as scientific methods: criticism and challenges****Reading:** Chapter 2: Psychology’s Scientific Methods by Santrock (Reading will be provided by instructor) |
| **3rd** | Theory Construction, Model Building and Model Selection | James Jaccard: Chapter from Source Book |
| **4th** | Quantitative research: Teaching and Research  | Lisa L. Harlow: Chapter from Source Book |
| **Assessment 3** | **Students will review three articles on a given area of psychology and will compare challenges, issues and future directions within particular domain**  |
| **5th & 6th** | Modern Test Theory, Meta Analysis  | Roderick P. McDonald: Chapter from Source Book |
| **7th** | Survey Designs and Measure Development  | Paul E. Spector: Chapter from Source Book |
| **8th****Assessment 4** | **Mid Term Exam** |
| **9th** | Effect Size and sample Size Planning  | Ken Kelley: Chapter from Source Book |
| **10th** | Experimental Designs for Causal inferences: Clinical Trials and Regression Discontinuity Designs | Kelly Hallberg, Coady Wing, Vivian Wong, and Thomas D. Cook: Chapter from Source Book |
| **11th** | Observation Methods  | Jamie M. Ostrov and Emily J. Hart: Chapter from Source Book |
| **Assessment 5** | **Students will conduct a field observation and will present in the class**  |
| **12th** | A Primer of Epidemiologic Methods, Concepts and Analysis with Examples and more advance Applications within Psychology  | David E. Bard, Joseph L. Rodgers, and Keith E. Muller: Chapter from Source Book |
| **13th** | Program Evaluation: Principles, Procedures and Practices | Aurelio José Figueredo: Chapter from Source Book |
| **14th** | Overview of Statistical Estimation Methods  | Ke-Hai Yuan and Christof Schuster: Chapter from Source Book |
| **Assessment 6** | **Students will write a review on latest statistical methods used in quantitative research from perspective of advantages and limitations**  |
| **15th** | Meta Analysis in Quantitative Research  | Weiner, Schinka & Velicer,  |
| **Seminar/ Guest Lecture**  |
| **Assessment 7 16th** | **Final Term** |  |

**Evaluation Criteria**

Following is the criteria for the distribution of marks to evaluate final grade in a semester.

|  |  |
| --- | --- |
| **Marks Evaluation** | **Marks in percentage** |
| Class Activities, Quizzes, Assignments, Mini field observations  | 30% |
| Short Literature Review | 10% |
| Term Project: Group Research project | 15% |
| Mid Term | 20% |
| Final exam | 25% |
| Total | 100% |

 **Grades**

Letter grades will be assigned based on the following distribution:

A = 90‐100%, B = 80‐89%, C = 70‐79%, D = 60‐69%, F < 60%.

 **Source Book:**

 Little, T. D. (2013). The Oxford Handbook of Quantitative Methods in Psychology (vol 1).

 **Other Books:**

1. Shaughnessy, J. J. (2012). *Research Methods in Psychology*. Ninth Ed. McGraw-Hill
2. Weiner, B. B., Schinka, J. A., & Velicer, W. F. (2003). Handbook of Psychology, Research Methods in Psychology. John Willey & Sons, New Jersey.

Baruch, Y., & Holtom, B. C. (2008). Survey response rate levels and trends in organizational research. *Human Relations*, *61*(8), 1139-1160.

1. Goodwin, J. (2010). Research in Psychology. Sixth Ed. N.Y: John Wiley
2. Horner, R. H., Carr, E. G., Halle, J., McGee, G., Odom, S., & Wolery, M. (2005). The use of single-subject research to identify evidence-based practice in special education. *Exceptional Children*, *71*(2), 165-179.

**Program: PhD Psychology**

**Course Code: PSY-704**

**Course Title: Advanced Statistics Cr Hr3**

**Course Description**

This course will help the students to learn and understand advanced statistical technique which are required to authenticate the findings with precision and accuracy. Learning new and advanced statistical techniques would open new horizons for the PhD scholars to address complex research questions in practical settings. The students also would get an opportunity to engage in high quality research work and to get their work published in nationally and internationally reputed journals which demands sophisticated and advanced statistical methods of hypothesis testing.

**Course objectives**

1. To be familiar with the basic statistical concepts and procedures &logic of statistical reasoning.
2. To show connection between theory, methods, and statistics.
3. To know the basic techniques of descriptive and inferential statistics.
4. To be able to understand statistical information in published articles / research

**Course Contents**

**Week 1& 2: Overview of Descriptive Statistics**

1. Descriptive and inferential statistics
2. Scales of Measurement
3. Random sampling
4. Displaying data, graphs
5. Measures of central tendency &dispersion
6. Properties of normal distribution

**Week 3: Confidence Intervals and Tests of Hypotheses about means**

1. Introduction using a normal sample distribution
2. One sample t-tests
3. Two independent samples
4. Two correlated samples
5. Heterogeneity of variance
6. Power analysis

**SPSS-Exercise 1:** Analyze the assigned data using appropriate versions of t-test on SPSS

and present results in the APA formatted tables showing mean, standard deviation,

t-st results with Cohan’s d. (7)

 **Week 4 & 5: Analyses of Variance**

1. One-way designs
2. Factorial designs
3. Repeated measure designs
4. Post Hoc tests
5. Effect Size & Power Analysis

**SPSS Exercise 2:** Conduct different forms of ANOVA and report the results in a table in APA style. (7)

**Week 6: Bivariate Correlation**

1. Pearson product moment correlation coefficient
2. Brief introduction of Point biserial*r,* Phi coefficient, and Spearman’s rho
3. Scatter plots
4. Brief introduction of regression

**SPSS Exercise 3:** Run correlation analysis on assigned data using SPSS and present results in a table in the APA format (7)

**Week 6&7: Regression Analysis**

1. Linear regression analysis
2. Multiple regression analysis
3. Hierarchical / Stepwise regression
4. Logistic Regression
5. Discriminant Analysis

**SPSS Exercise 4:** Conduct hierarchical/stepwise regression analysis on assigned data using SPSS and report the results in APA format. (7)

**Week 8: MID TERM EXAM**

**Week 9: Regression basedAdvance Analysis**

1. Mediation Analysis
2. ModerationAnalysis

**SPSS Exercise 5:** Conduct mediation and moderation analysis on assigned data using SPSS and report the results in APA format. (7)

**Week10 &11: Factor Analysis and Reliability Analysis**

1. Theory of factor analysis and reliability analysis

**SPSS Exercise 6:**Practical demonstration of conducting factor analysis and reliability analysis on assigned data &present results in APA format. (7)

 **Week 12 & 13: Nonparametric Tests**

1. The Mann-Whitney test
2. Wilcoxon’s signed rank test
3. Kruskal-Wallis ANOVA on ranks
4. Friedman’s rank test on correlated samples
5. Goodness of fit
6. Analysis of contingency tables

**Week 14 &15: Structural Equation Modeling using AMOS**

1. Basic Concepts, model specification, model identification, model modification and model fit.
2. Path Analysis
3. Conditional Process Analysis
4. Confirmatory Factor Analysis

**SPSS Exercise 7:** Conduct path analysis conditional process analysis and CFA on assigned data using AMOSon assigned data &present results in APA format. (8)

**Week 16: Final Exam**

**Student Evaluation:**

SPSS Exercises; 50%

Midterm Exam = 25%

Finalterm exam= 25%

**Recommended Books**

Gravetter, F., &Wallnau, L. B. (2002).*Statistics for the Behavioral Sciences,* Latest edition. Pacific Grove, CA: Brooks/Cole Publishing.

Green, Salkink, &Akey. (2000). *Using SPSS for windows: Analyzing and Understanding data* (2nd ed.). :NJ: Prentice Hall.

Howell, D. C. (2007).*Statistical methods in psychology* (6thed.). Australia: Thomson Wadsworth.

Kline, R, B. (2011). *Principles and Practice of Structural Equation Modeling* (3rded.). US: Guilford Press.

Byrne, B, M. (2010).*Structural Equation Modeling with AMOS: Basic Concepts, Applications, and Programming* (2nded). USA: New York, Routledge

**Program: PhD Psychology**

**Course Code: PSY-705**

**Course Title: Advanced Psychological Assessment 3 Cr. Hr**

 **Course Description**

The course on psychological assessment covers theory and practice about use of psychological tests and others methods of assessments namely observation, interview and situational assessment in industrial and organizational settings. Balancing theory with practical exercises i.e. developing norms, evaluation of reliability and validity, item-analysis etc students will be enabled to translate the concepts into work-tasks for clearer understanding of these procedures and learning them by doing. Secondly, they will be trained to make assessment using test and non test data including observation, interview assessment as well as biographical / demographic information and write integrated assessment reports about individuals. They will also learn how to evaluate tests of foreign origin regarding their usability /adaption in Pakistan. A group project will also be undertaken as a practicum by the participants to develop an indigenous test /questionnaire keeping in view the standards principles and standards of psychological testing with a view to development tests and tools keeping with the local context including language and culture in Pakistan. The course requires thorough understanding of classical /established tests of cognitive abilities and personality

 **Learning Objectives:**

 The students will be able to show, as outcome of the course, how psychometric concepts and procedures are applied in practice in evaluating psychological test and assess their strengths and limitations. They will be able to use methods of test writing, metric analysis, test interpretation and reporting.

 They will be able to use tests of intelligence and personality in standardized manner according to the manual and ethical / professional guidelines. Also they demonstrate suitable choice of psychological tests along with other methods of assessment including observation, interview and situational assessments according to the specific purposes of assessments.

 They will be able to hone their testing skills thru exercises, practicum and assignments to be delivered in this course. They will know limitations and strengths of different types of assessments and how they complement each other.

 They will exhibit an understanding of some of the misconceptions about psychometric jargons and terms one they set their hands in using these measures and experiencing what strengths and limitations do they realize in assessment work.

 **System of Instructions:**

There will be lectures in some of the classes and seminar /discussion in others on assigned chapters / readings. There will be a good deal of practical work to get firsthand knowledge of psychometric procedures.

**Course contents:**

|  |  |  |
| --- | --- | --- |
|  Week | Contents | Resources  |
| 1-2 | Overview of psychological testing, individual difference, ideographic & nomothetic approaches; limitations/ strengths | A & S Ch.1Reading No 1 |
| 3-4 | Statistical and psychometric constructs / procedures: validity, reliability, standardization | Cohan, Ch. 5-6 |
| 5 | Bases of test selection, test evaluation and problem formulation, hypothesis testing etc. | G & G Ch.1, pp 10-21Reading No 3 |
| 6-7 | Test scoring and interpretation procedures including use of norms, scaled scores (Percentiles, T scores) **Practicum-1** Mean, SD, Correlation, SEm. | Cohan, Ch.3-4 |
| 8 | Intelligence Testing: Theory, Administration, Scoring & Report Writing for WAIS, Raven’s SPM **Practicum-2** Use of WAIS & SPM | Cohan, Ch. 8-9, G&G Ch.5  |
| 9 | Review of Research on Structured Personality Questionnaire: NEO-FFI, EPPS and MMPI: Theory, Practice and Research **Practicum-3** Use of these questionnaires  | Cohan Ch.11-12A&S Ch.5 |
| 10-11  | Using ability and personality tests in applied settings Achievement / Aptitude / Entrance Tests: Theory, Administration, Scoring & interpretation ( SAT, GAT, NAT & NTS) **Practicum 4**Personality Assessment: Theory, Administration, Scoring, Report Writing (PAI, NEO) **Practicum 5 S**ubmission of Assessment Reports for Practicum 1-4 by end of 13th weekAssignment-2 Evaluate a psychological Test by reading the test and its manual (5 marks) Criterion: Students will critically evaluate its contents, psychometric evidence and scope / utility of the test in Pakistan.Project:Test Development on a Psychological Construct\*(10) | G&G Ch. 7-11Reading No 4 & 5 |
| 12 | Indigenizing test conceptualization and development as culture fair assessment Test adaptation / translation procedures and test revisionAssignment-1 Search 2 Articles relevant to this topic from last 5 years PJPR & JBS answer questions\* listed below. 5marks | Reading No 6 |
| 13 | Writing succinct, valid and well organized assessment reports  | A&S Ch.11G&G Ch.8 |
| 14 | Behavioral Observation and issues surrounding the technique | G & G Ch.4 |
| 15 | Interview Assessment: Structured & Non-Structured Interviews Assignment-2 Mock Interviews & Assessment Report (5 marks) | A&S Ch.2G&G Ch.3 |
| 16 | Presentations & Final Exam Students to keep up with the readings & lecture material to perform well. Final exam will assess student knowledge not measured in assignments.  |  |

**Student Assessment & Grading**

|  |  |
| --- | --- |
| Performing Practicum 1-5 including test administration, Protocol Scoring & reporting protocol results / Interpretation & assessment Reports | 25 points |
| Assignments 1-2 & Class presentation/ Discussion | 10 |
| Midterm Exam | 25 |
| Test Writing Project  | 10 |
| Final Exam | 25  |
| Class participation | 05 |
| Total Points | 100 |

**Grades**

Letter grades will be assigned based on the following distribution:

A = 90‐100%, B = 80‐89%, C = 70‐79%, D = 60‐69%, F < 60%.

 **Required Textbook:**

1-Cohan, R.J. & Swardic, M.E. (2013) Psychological Testing and Assessment (8th Ed.) along with Exercise –book New York: Mc Graw Hill.

2-Archer, R. P., & Smith, S. R. (Ed.)(2008). *Personality Assessment*. New York, NY: Routledge.

 3-Gary Groth-Marnat (2003) Handbook of Psychological Assessment (4th Ed.) Wiley

 **Readings:**

 1- American Psychological Association (2002) Ethical principles of psychologists and code of conduct. [WWW.apa.org/ethics/code2002.html](http://WWW.apa.org/ethics/code2002.html)( standard9 assessment)

 2-Ben‐Porath, Y. S. (2003). Assessing personality and psychopathology with self report inventories. In J.R. Graham & J.A. Naglieri (Eds.), *Handbook of Psychology*, (Vol. 10, pp. 553‐578). Hoboken, NJ: John Wiley & Sons, Inc.

 3. Meyer, G.J. et al. (2001). Psychological testing and psychological assessment: A review of evidence and issues. *American Psychologist, 56*, 128‐165.

 4. Ozer, D. J. & Reise, S. P. (1994). Personality Assessment. *Annual Review of Psychology, 45*, 357‐388.

 5-Tellegen , A. (1991). Personality Traits: Issues of Definition, Evidence, and Assessment. In W. M. Grove & D. Cicchetti (Eds.), *Thinking Clearly about Psychology*

6- The short-form revised Eyseneck Personality Questionnaire- A Hindi Edition (EPQRS-H) www.industrial psychiatry.org

**Project (TDP)**

Test Development Project

Students will be expected to write a Test Development Project (TDP) on a Psychological Construct. The write up should be in APA style addressing the following questions:

 The history of the construct and its conceptualization

How this construct was tested in the past? Any criticism in the literature?

How would you go about designing a test to measure the construct?

 Describe how to develop test items & their answer format?

Piloting and item-analysis plan including social desirability of the items.

What methods would you use to establish psychometric characteristics of the instrument?

What is its utility and scope of the test as well as limitations?

**Program: PhD in Psychology**

**Course Code: PSY-703**

**Course Title: Literature Review & Critical Thinking Cr. Hr3**

 **Course Description:**

This course is designed to develop your understanding of the critical role of the literature review in the research process. Ultimately you will plan and produce a draft of literature review related to your own research interests in field of psychology. This course is designed to develop two modes of learning i.e., (i) skill based learning of writing literature reviews for thesis, empirical research articles, conceptual or theory based papers, Meta analyses formats and (ii) steps of developing and learning coherent logical writing and critical thinking in research.

 **Outcome**

At the end of course, students will be able to write and design a template of literature review draft for Ph. D dissertation.

**Course Contents**

|  |  |  |
| --- | --- | --- |
| **Weeks**  | **Contents** | **Books**  |
| **1st & 2nd**  | The purpose and logic of a literature review  |  |
|  | * Significance and relevance of psychological phenomenon
* Relevance of theoretical and empirical knowledge
* Developing research questions clearly and explicitly
* Inductive and deductive logics
* Clear and convincing writing
 | Evans, 2007 |
| **3rd & 4th**  | How to construct a coherent and logical literature review  |  |
|  | * Reasons for doing literature review
* Critical analysis of literature review
* Questions for critically analyzing literature review
 | Mertens, 2010 |
|  | **Assessment 1** |  |
| **5th**  | **Draft Plan Of Literature Review (See page 3)** |  |
| **6th & 7th**  | Analysis of the literature review through worked examples  |  |
|  | * The literature review process
* Producing a draft
* Study skills and techniques
* Review plans and protocols of planning literature review
* Avoiding common pitfalls
 | Booth, 2012 |
| **8th and 9th**  | Criteria for good literature reviews  |  |
|  | * Teaching Students to write literature review
 | Reading |
|  | **Assessment 2** |  |
| **10th**  | **Critique journal Article/Theses (See page 3)** |  |
| **11th & 12th**  | Developing research proposal: the link between the literature review and research question  |  |
|  | * Orientation of readers to your topic
* The introduction
* The rationale
* The process of searching the literature
* Constructing arguments
 | Denicolo, & Becker, (2012). |
| **13th & 14th**  | Production of the literature review |  |
|  | **Assessment 3** |  |
| **15th**  | **Writing Literature Review (See page 3)** |  |
| **16th**  | **Presentations**  |  |

**Recommended Books**

Booth, A., Papaionnou, D., & Sutton, A. (2012). *Systematic Approaches to a Successful*. Sage

Publications: London

Denicolo, P., & Becker, L. (2012). Success in Research: Developing Research Proposals. Sage

Publications: London

Literature Review . Evans, J. (2007). *Your Psychology Project: The Essential Guide*. Sage

Publications: London

Mertens, D. M. (2010). Research and Evaluation in Education and Psychology (ed 3rd). Sage

Publications: London

 **Assessment Plan**

|  |  |  |
| --- | --- | --- |
| **Specific Learning Outcomes** | **Assessment Tasks** | **Outcomes** |
| 1. Design, collect and reflect on research and data in order to support the development of a research question.
 | **1- Draft plan of literature review** | **Goals** | Assessing your ability to collect and categorize relevant researchClear and concise communicationAppropriate referencing to your discipline |
| The purpose of creating the draft literature review is for you to provide a foundation for your research; this is a short and concise document that creates a template for your larger literature review. This task requires the identification and analysis of immediate disciplines, identification of the relevant journals and a coherent outline of the topics chosen for inclusion in the literature review |
| **Weighting (20%), length (1000 words)**  |
| 1. Analyze and synthesize current literature to identify gaps
 | **2- Critique journal** **Article/Theses** | You will identify both the strengths and weaknesses of specific research methodologies and how they relate to views of knowledge and research. You will determine and clearly identify the relevant disciplines, diagnose the basic flaws and positive aspects of the research methodology. | Depth of synthesis and analysis of research. Clear and concise communication. Appropriate referencing to your discipline |
| **Weighting (30%), length (1500 words)** |
| 1. Identify both the strengths and weaknesses of specific research methodologies and how they relate to views of knowledge and research
 | **3- Writing Literature Review** | You are required to write a clear and concise draft literature review based on their research question, using skills gained in the lectures and workshops. This task involves a comprehensive and critical analysis of key journal articles highlighting the gaps in the literature. Furthermore, attention to the development of a logical and flowing argumentand the concise and accurate communication and presentation of the literature revieware necessary | Assessing your ability to collect and categorize relevant research.Depth of synthesis and analysis of research.Organization and logic of the literature review.Clear and concise communication.Appropriate referencing to your discipline |
| **Weighting (40%), length (2500 words)** |
| 4- Presentation | A comprehensive Presentation | **Weighting (10%)** |  |

 **Program: PhD Psychology**

**Course Code PSY-803**

**Course Title: Seminar: Counseling /Clinical Psychology Cr. Hr 3**

 **Course Description:**

The course is designed to teach students the necessary understanding in the area of counseling / clinical psychology. This is a seminar based course so all the topics will be covered in seminars. Some guest lectures will be provided by professional psychologists however, mainly all the topics will be covered by students themselves. The main focus will be on our cultural context.

 **Learning Outcomes:**

By completing the course the students should able to:

* Have understanding about the areas that are linked to counseling psychology and clinical psychology
* Should be able to identify the topics needed to be explored in this particular area in our cultural context.
* Have understanding of the basic research methods used in this domain.
* Understanding about all the areas covered in the course

 **Course Methodology**

The course is seminar based so the students will be assigned topics and required to conduct seminar on them. However, they are also required to be attentatively participate in the seminars presented by other classmates. They are also required to study the topic to be presented so they can fully contribute in the seminar. Participation is a key to achieving the objectives of the course.

**Participant Responsibilities**

The Participant is responsible for all information presented in class (unless told otherwise) and all information in the reading assignments, whether or not covered by the instructor. In case of absence it is the participant’s responsibility to get class notes, handouts, and/or directions from a classmate.

**Class Participation**

Positive, healthy and constructive class participation will be monitored for each class. Particular emphasis will be given during the presentation sessions. The manner in which the question is asked or answered will also be noted. Your positive behavior in the class will contribute to the class participation marks.

**Course Policies:**

1. Regularity and punctuality is strictly observed. Students with less than 75% attendance will not be allowed to sit in final exam.
2. Students are expected to meet time lines for assigned seminars. One mark will be deducted on delay of each day. Plagiarism will result an "F" grade. Missed work will only be made up on valid reasons.

**Course Contents**

|  |  |
| --- | --- |
| **Weeks**  | **Contents** |
| **1st**  | Introduction of Seminar’s Structure and its topics |
| **2nd** | Seminar on difference between clinical\ counseling psychology and other fields of psychology presented by professional clinical psychologist (guest lecture) |
| **3rd** | Therapeutic skills required for clinical psychologist and counselor (guest lecture by a psychologist) |
| **4th**  | Seminar on major theoretical and therapeutic approaches of counseling and clinical psychology  |
| **5th**  | Review of clinical case reports published in Pakistan |
| **6th**  | Counseling direction in Pakistan: current scenarios |
| **7th**  | Most prevalent disorders deduce in our cultural context |
| **8th**  | Efficacy of clinical tools/ tests used in reference to Pakistan |
| **9th**  | Current trends in counseling/ clinical domain considering our culture |
| **10th**  | The most effective treatment management plans used in Pakistan based on experimental studies |
| **11th**  | Trend of research in clinical and counseling domain in Pakistan |
| **12th**  | Stress, anger and trauma: significance and management in Pakistan |
| **13th**  | Areas needed to be explored in this particular domain considering current status |
| **14th**  | Areas needed to be explored in this particular domain considering current status |

**Recommended Books and Journals:**

Fall, K, A., Holden, J, M., & Marquis, A. (2010) Theoretical *Models of Counseling &*

 *Psychotherapy*, (2nd Ed). Taylor & Francis Group.

Capuzzi, D., & Gross, D, R. (2007). *Counseling & Psychotherapy, Theories & Practice, (4th Ed).* Pearson Education, Inc.

Seligman, L., & Reichenberg, W. L. (2010). Theories of Counseling and Psychotherapy. (3rd Ed). Pearson Education, Inc.

Pakistan Journal of Psychological Research. National Institute of Psychology. Quaid-i-Azam University. Pakistan.

Pakistan Journal of Social and Clinical Psychology. Government College University. Pakistan

 Journal of Consulting and Clinical Psychology. American Psychological Association.

 Journal of Consulting and Clinical Psychology. American Psychological Association.

 Journal of Counseling Psychology. American Psychological Association.

 Journal of Counseling Psychology. American Psychological Association.