

**SUBJECT NAME:** Research Methods and Evidence-Based and Informed Practice

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**SUBJECT DESCRIPTION**

This subject covers the foundational elements of research design and methodologies necessary in production of quality research, including rigor, validity, reliability, objectivity, and relevance. The subject also addresses the criteria and strategies used to integrate best-practices research with the kinesiologist's expertise, the client's values, and the social context in which the services are being provided to optimize client care outcomes and quality of life in the delivery evidence-informed practice.

**CONTENT COVERED**

- Research in knowledge production
- Developing research questions
- Research design and methodologies
- Data collection methods and analysis of data
- Ethical considerations in human and animal research
- Literature reviews
- Describe the purpose of a research paper and its components
- Critical analysis of research articles and the process of constructive criticism
- Research proposal development, research design or research project
- Clinical vs academic research
- Research application in professional practice

**KEY PERFORMANCE INDICATORS (KPIs)**

1. Identifies components of research papers and articulates their purposes.
2. Understands how the process of research investigation expands and contributes to knowledge.
3. Identifies the qualitative and quantitative methodologies of study design, including cross-sectional, RCT, and longitudinal studies.
4. Aligns the choice of research methods to underlying epistemological assumptions when conducting research.
5. Utilizes relevant research terminology when communicating with stakeholders and clients.
6. Interprets relevant information from published studies.
7. Recognizes limitations in assessment data, or invalid results, and makes recommendations for re-assessment if necessary.
8. Identifies the client's current health status, abilities, limitations, impairments, and risk/hazards based on the relevance of assessment data.
9. Applies evidence-informed practice and valid, reliable, and standardized measurement protocols to inform critical thinking and clinical reasoning.
10. Identifies the impact of medical interventions, medication use, psychosocial issues, and vocational, avocational, and recreational history on client well-being, recovery and participation in treatment.
11. Identifies consultation requirements and/or the need for collaboration with others.
12. Selects and recommends client interventions that are evidence-informed and consistent with client goals, health status, socio-economic status, functional needs, and assessment findings.
13. Considers limitations of evidence-informed practice and/or contraindications in the assessment method and/or tool(s).
14. Develops realistic, relevant, measurable, sustainable, and evidence-informed recommendations and/or goals in the practice setting.