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Evidence-Based Social Sciences: A New Emerging Field

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Abstract

Evidence based social sciences, is one of the state-of- the-art area in this field. It is making decisions on the basis of conscientious, explicit and judicious use of the best available evidence from multiple sources. It also could be conducive to evidence based social work, i.e a kind of evidence based practice in some extent. In this new emerging field, the research findings help social workers in different levels of social sciences such as policy making, management, academic area, education, and social settings, etc. When using research in real setting, it is necessary to do critical appraisal, not only for trusting on internal validity or rigor methodology of the paper, but also for knowing in what extent research findings could be applied in real setting. Undoubtedly, the latter it is a kind of subjective judgment. As social sciences findings are highly context bound, it is necessary to pay more attention to this area. The present paper tries to introduce firstly evidence based social sciences and its importance and then propose criteria for critical appraisal of research findings for application in society.

Keywords: Social Sciences, evidence, field

Introduction

Undoubtedly, it is necessary to move from opinion-based to evidence-based sciences. Evidence based sciences is a process of evidence application in which individuals working in different levels of policy making, education and social working, etc. implement the available evidence in their real practice. They should involve their professional judgment through which they could find a way for evidence application or research finding in real practice named "evidence-based practice" (1).

"Evidence-based practice is about making decisions through the conscientious, explicit and judicious use of the best available evidence from multiple sources by:

1. Asking: translating a practical issue or problem into an answerable question
2. Acquiring: systematically searching for and retrieving the evidence
3. Appraising: critically judging the trustworthiness and relevance of the evidence
4. Aggregating: weighing and pulling together the evidence
5. Applying: incorporating the evidence in the decision-making process
6. Assessing: evaluating the outcome of the decision taken to increase the likelihood of a favorable outcome"(2).

As other professionals, the evidence-based practice movement and evidence application in real settings could be challenging in different areas (3). Campbell collaboration has highlighted the need for evidence-based social sciences. In order to launch this new emerging field, it is necessary to clarify this field and then learn how the evidence-based social sciences could be implemented. (4). Therefore, this study aimed to introduce Evidence-based social sciences, and propose criteria which could be taken into account by involved people in the process of applying evidence in real practice.

What is Evidence-based social Sciences?

Evidence-based practice in social sciences is a new paradigm that promotes more effective social interventions by encouraging the conscientious, judicious, and explicit use of the best available scientific evidence in professional decision making. Social work practice literature has also increasingly grown in recent years. On the other hand, the widespread availability of scientific resources, as well as increased acceptance of systematic reviews and evidence-based practice guidelines, have made research findings more accessible for involved people in this field.(5)

Like other fields of evidence based sciences, Evidence-based social sciences, also has been considered as the conscientious, explicit and judicious use of the most up-to-date and best available evidence to help make decisions on the fields in which the individual expertise have been integrated with the best available external evidence. It needs systematic retrieving of the most current literature; the best decision has

been made based on these evidence in order to answer the questions rooted deeply in the real setting. (6)

The next step is to find the best evidence or studies with which we could answer the questions. Studies has been classified based on the applied methodologies in various levels. The higher level of evidence are considered more reliable. In recent decades, systematic reviews, meta analyses, synopses and meta syntheses studies have modified the pyramid of evidence. Obviously, they are more efficient than single studies. Moreover, systematic review followed by meta-analysis, has higher quality of evidence. The last step is integrating and applying the appraised evidence to individual's expertise. The appraisal process includes answering questions in order to assess the quality of the published papers and determine if its findings can be applied to actual practice. These questions assess the applied methodologies and related issues such as sampling method, analysis process, and so on. Although there are many standard appraisal tools and reporting guidelines, they are not only too complicated to apply in real settings, but also they are too objective. On the other hand, they appraise studies in detail and could not cover the evidence based elements and the feasible indexes for real practice that are necessary for everyday situations. (7)

Need for introducing new criteria for Evidence-based social sciences:

It is crystal clear that applying the findings of research in social sciences moves on a highly polarized spectrum, with the choice presented as 'evidence based' or 'opinion-based'. Certainly a significant body of evidence is available, in some topics, however, in other areas, the evidence is less. In evidence-based social sciences, firstly individuals are encouraged to question their own practice, in order to look for the available evidence, then make a relation between the evidence and their own situation and finally apply their professional judgments for this process. (8)

A number of publications in the social work field reported problematic preoccupation with evidence-based practice due to either restricted or inappropriate understanding of the fundamentals of research in the social sciences. As a result, social works are at risk of knowledge deficiency to inform practice. It is occurred frequently not only for quantitative but also for qualitative research in social sciences fields (9).

Although researchers have begun to define and build frameworks for the process of evidence-based social work (EBSW), few practitioners appear to employ evidence-based approaches and relatively little is known about how to facilitate this form of knowledge transfer. (10)

On the other side, there is a growing body of evidence illustrating effective and efficient interventions, but no significant body of work has been conducted for using research findings in the field. Some scholars have focused on the process further than individual, they introduce some criteria and approaches and proposed more developed frameworks in order to delivery of research evidence into practice.

Although a number of emerging social work implementation strategies has been emerged, no single best method has been identified yet. (11)

The suggested criteria in this paper has concentrated on this fact that implementation of evidence based social sciences does not necessitate the involved people to be a researcher, but they should be able to do critical appraisal and made their decision based on their judgments. Indeed it is an attitude creating a culture or ethos to think critically about what they are doing, look at the available evidence and on make decisions about their practice based on their professional judgment. On the other hand, the proposed criteria have emphasized on the context dependent nature of social sciences (12), because the evaluation of an approach in a particular context is highly dependent on the people experience of that context. The EFEPAC criteria highlight a number of dimensions regarding evidence in social sciences: quality vs. relevance; quality vs. validity; and utility vs. the setting or context (8). The different dimensions could reflect the nature of research and innovation in social sciences fields. It can highly motivate people to construct a culture or attitude in which decision making takes place in related context.

What is EFEPAC?

As to the literature the majority of current practice is highly based upon either personal experience, or experience of others who have faced to the same problem as well as people anecdotes instead of the systematic appraisal of the evidence. It seems this process requires a rethinking and revision. There is an urgent need for mechanisms that review available information and make recommendations to practitioners. (13)

Thus far no comprehensive endeavor has been made to formulate a systematic implementation framework for evidence-based practice in social work where social and cultural, the professional and practice-based, and the educational and training contexts have been underlined. (14)

We try to suggest a format or framework for providing a context bound appraisal for better practice and decision making in this field. It offers a model which helps people to make decisions about practice in different fields of social sciences, taking into account a relevant factors of their own context for practice. The approach described also has provides them with a powerful tool to move forward the evidence based social sciences agenda. The EFEPAC criteria is an acronym of **E**vidence grading, the **F**easibility and need for related modifications, the **E**xtent of evidence, the **P**ower of evidence, the **A**im of study and its measurement (Validity) and the **C**ontext or participants characteristics.

EFEPAC criteria:

The available evidence can be graded on each of the six dimensions of EFEPAC. In the ideal situation the evidence could be high on all, but in reality this rarely occurs. The

evidence may be good in some of them, but poor in others. People has to balance the different dimensions and come to a decision on a course of action based on his or her professional judgment. The overall result determine whether it is good, moderate or poor for the context where the evidence must be applied.

Criteria/ Grade	Good	Moderate	Poor
E			
F			
E			
P			
A			
C			
RESULT			

Each dimension of EFEPAC criteria has been clarified and explained as follows:

The Evidence Grading (8)

No evidence

1. Evidence-based on professional judgement
2. Evidence based on educational and social principles
3. Evidence based on experience and case studies
4. Evidence based on consensus views built on experience
5. Evidence based on studies in a comparable but not identical area
6. Evidence based on well-designed non-experimental studies
7. Evidence based on well-designed quasi-experimental studies
8. Evidence based on well-designed controlled studies

The Feasibility and need for related modifications

The Extent of evidence

Primary research (single studies of non-experimental, experimental designs)

Secondary research (different designs of reviews, meta analyses and meta syntheses)

Tertiary research (review on reviews and review on meta analyses)

The Power of evidence

Statistical (statistical significance)

Social (significance of applied social method or technique)

Impact (social impact)

The **Aim** of study and its measurement (Validity or methodology rigor)

The **Context** or participants characteristics (relevancy between evidence and our own context)

Conclusion

Evidence-based social sciences rooted in evidence based sciences in which the research findings help people involved in their professional practice to make more clear-cut decisions. These decisions not only fortify the systems but also help to generate a scientific culture in practice and provide a tool for tracking and finding the errors and flaws. On the other hand, it helps people to fill knowledge gaps and answer the questions for bridge the gap using evidence. In order to switch evidence-based social sciences, not only objective appraisal by reporting guidelines and appraisal tools are necessary, but also professional judgement is crucial. Due to the context bound nature of social sciences integration of objective and subjective appraisal is necessary. The recommended criteria of EFEPAC helps to implement evidence in real practice, social work more efficiently. It could be applied for social workers in different fields of social sciences.

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