In the Light of Epistemological Debates about Knowledge, is ‘Evidence-Based’ Policy Making (in the Britain) Anything More than Political Rhetoric?

Dr. Samiul Parvez Ahmed
School of Business, Independent University, Bangladesh (IUB)
Plot 16, Block B, Aftabuddin Ahmed Road, Bashundhara R/A, Dhaka - 1229
Tel: +88 (0) 178-0008844, E-mail: samiul@iub.edu.bd

Nafeesa Tabassum
School of Business, American International University—Bangladesh (AIUB)
Banani C/A, Dhaka-1213, Bangladesh
Tel: +88 (0) 179-0346346, E-mail: nafeesa_tabassum@aiub.edu

Abstract
Recently, the policy discourse in Britain has shifted towards evidence-based policy (EBP) where ‘evidence’ is founded on rationality of natural science. In one hand, the proponents of EBP advocate for scientific approaches (e.g. experimentation, systematic review) in generating evidence in social science in order to modernising the policy making process. On the other hand, question arises whether such technical/instrumental approach in social science can really construct appropriate knowledge in order to improve government’s policy making endeavour. Critical analysis of the scientific research approaches in generating evidence (knowledge) in social science reveals that the present government’s ‘what works’ philosophy is a major fallacy of their effort to bridge the gap between policy process and social research because there are some inherent methodological and epistemological issues that the evidence-based research faces in the way of understanding the social world. Basically, the critics of EBP warn that the concept of ‘what works’ evidence is myopic, because it defines ‘evidence’ scientifically and mechanically that is too narrow from social science’s perspective.

Keywords: evidence based policy, scientific research, policy research

1. Introduction
The epistemological debate about knowledge in social science is a multi-disciplinary issue for long. Philosophers, sociologists, anthropologists, economists and other social researchers have put rigorous effort to find out ways to reach to the reality or true knowledge of lifeworld, especially social world; but great deal of disputes persist over their philosophies and methodologies. One of the major issues emerges from the rationality perspective where instrumentalists and non-instrumentalists holding contrasting views about epistemology of knowledge — scientific explanation versus interpretive understanding (Hollis, 2003). The recent conception of evidence-based policy (EBP) is primarily grounded on the rationality of natural science where the rationality and logic supersedes normative aspects of social science. But the critics of EBP argue that the foundations of such rational conception of EBP is not solid (Sanderson, 2003). Furthermore, some issues have been raised by the social researchers about the ‘appropriateness’ of the instrumental concept of ‘evidence’ as a means for policy guidance. In one hand, there is political inclination for evidence-based policy in modernising the policy making process. On the other hand, question arises whether such technical/instrumental approach in social science can really construct appropriate knowledge in order to improve government’s policy making endeavour. However, in order to find a plausible answer to the central question, I have explored and analyzed the basics of EBP, its role in policy formulation, the relevant epistemological issues about knowledge in relation to the role of ‘evidence’; and consequently I have explored whether the EBP is contributing knowledge in the policy process or is it just a political rhetoric.

2. Overview of Evidence-Based Policy & Its Role
The recent rise of the evidence-based policy (EBP) in Britain primarily stems from the political discourse. The
demand for the EBP came into public attention since Labour government introduced their ‘what matters is what works’ philosophy in 1997 (Davies et al., 2007:1). Although, their broader philosophy stresses on the development of crucial relationship between social research and the policy making process; but specifically it focuses on the role of evidence in modernizing the policy making process. This philosophy is vividly portrayed by David Blunkett’s speech to the Economic and Social Research Council (ESRC) in February 2000, where he mentioned that the social scientists should inform the government about ‘what works and why and what types of policy initiatives are likely to be more effective’ (Parsons, 2002:44). Thus, the role of the evidence came into forefront, emphasizing that the evidence should guide and direct the policy process.

Primarily, the proponents of EBP argue that one of the major obstacles of the evaluation research in the policy making process is its time consuming nature. According to this view, as policy revolves faster than the research cycle, it is difficult for the evaluation research to feed the policy process timely (Pawson, 2002). Whereas, they claim that ‘it is possible to provide dispassionate, independent, and objective evidence to evaluate policy options’ (Pawson, 2006:7). Moreover, it is often argued that peoples’ trust on professional/expert views have been decreased significantly; and often people demand supporting evidence for such professional or expert opinions. On the other hand, the explosion of the information technology has made information/data easily accessible and available to everyone at relatively cheaper price. Thus, it has become easier to evaluate and accumulate evidence from various sources and take well informed decision about any policy issue. The proponents of EBP also argue that the traditional policy process is highly opinion based where the use of evidence is selective and opinions are ‘untested views of individuals or groups, often inspired by ideological standpoints, prejudices, or speculative conjecture’ (Davies, 2004:2). These are some few factors that are shifting the interest of policy process towards evidence-based policy research.

With this realization, the proponents of EBP suggest that there is a need to generate and formalize evidence to support the policy making process. In line with this view, there have been two kinds of efforts to support the policy process, one focuses on scientific approach in generation of evidence (e.g. experimentation) and the other focuses on the accumulation or aggregation of the bygone research results (e.g. systematic review). The former effort has concentrated on some sophisticated scientific approaches which are Randomized Controlled Trials (RCT), Cohort Studies, Case Control Studies etc. And the later effort has turned towards the systematic reviews of the findings of the existing research works on the relevant policy arena (Pawson, 2002). The two commonly used systematic reviews are meta analysis and narrative reviews whereas a relatively new approach offered by Pawson (2002) is the realist synthesis, where he tried to address some inherent issues of the traditional meta-analysis approach. Irrespective of their ideological or methodological differences, the basic objective of these systematic review approaches are similar; that is their intention is to explore one or more ‘output’ (net results, findings, synthesis etc.) from several related researches. In any case, whatever methodology or philosophy they follow, the important issue is whether such instrumental approaches (experimentation or systematic review) are the right approaches to generate appropriate knowledge about social world.

3. Relevant Epistemological Issues about Knowledge: Focus on Evidence

Epistemology or the theory of knowledge in social science is a debatable issue for long. One of the basic arguments about epistemology in social science stems from a simple question—‘how we know anything about social world?’ (Hollis, 2003:9). While answering this question, the traditional approach or empiricist view focuses on the basic conception of knowledge. According to them knowledge is ‘justified, true belief, finds a class of facts which are beyond doubt, for instance facts of observation’ (Hollis, 2003:9). John Stuart Mill upholds a similar view that ‘confines knowledge of the world to beliefs which observation can justify’ (Hollis, 2003:11). Now it is important to explore the relationship between evidence and knowledge creation in social science. At first, let us look at what constitutes evidence.

The spectrum of evidence is fairly broad—starting from simple witnesses to scientific proof can be considered as evidence (Davies et al., 2007). But, from the perspective of EBP, it is the systematic research through which we can reach to evidence. More specifically, evidence ‘comprises the result of systematic investigation’ as opposed to ‘expert judgement, anecdote, or theory unsupported by empirical evidence’ (Davies et al., 2007:3). EBP stresses on the importance of observable and testable evidence over normative judgements/opinions. Usually, in
EBP process, the evidence generated by the experimentation or systematic review, specifically evidence generated by RCT or Meta Analysis, are placed on the top of the ‘evidence hierarchy’ whereas expert opinion, personal experience or anecdote are placed at the bottom of the table (Davies and Nutley, 2007). In scientific approach, the validity of evidence is generally tested by its logic, experimentation of hypothesis or the way evidence is produced, ‘namely using systematic process to ensure validity’ (Kouri, 2009:73). These assumptions/preferences about the validity of evidence show that the EBP favours more of scientific approaches than that of social research approaches.

Now let us explore the relationship between evidence and knowledge creation. If we consider the evidence generated by mechanistic approaches or systematic investigations as ‘justified facts’ then, as per empiricists’ definition of knowledge these evidence are contributing in knowledge creation. However, this role of evidence only confined to the empiricists’ view of knowledge. But the meaning of knowledge, as per the empiricist approach, does not hold universally in all circumstances. For example, the recent epistemologists have objections over this empiricist view of knowledge as it lacks clarity about understanding the ‘knowledge about hidden structures’ of social life (Hollis, 2003). Thus, policy making in social science requires more than just systematically justified facts.

Some argue that the weighing of evidence is not valid and this approach has been developed by only particular stream of academicians, especially from medical and physical sciences. Glasby and Beresford (2006:271) argue that ‘objectivity is not a prerequisite for valid evidence’ and ‘there is no such thing as hierarchy of evidence’. They claim that, besides the scientific or quantitative evidence, peoples’ views and experiences are equally important and ‘neglecting these perspectives gives a false and potentially dangerous view of the world’ (Glasby and Beresford, 2006:271). They support their claims by their personal experiences. They showed that their research work got differential treatment from different group of reviewers; that is, while publishing their research papers, the medical journal reviewers rejected their paper on the basis of lack of systematic methodological rigour; whereas the same paper was accepted by qualitative research oriented journals. And thus they raised the question—who to decide what is evidence and what constitutes evidence?

Another issue about epistemology of knowledge rests on the contrasting views of instrumentalists and non-instrumentalists about the rationality conception of social science. According to the instrumentalists’ view, natural phenomena can be explained through rational reasoning whereas non-instrumentalists’ view emphasizes on interpretive understanding (achieving Verstehen) of lifeworld. From these rationality perspectives, EBP fits well with the instrumental rationality (Sanderson, 2003, Webb, 2001); that is EBP follows the ‘rational model of the policy-making process’ (Nutley and JeffWebb, 2007: 34). Basically, EBP intends to work as a

‘means of ensuring that what is being done is worthwhile and that it is being done in the best possible way’ (Davies et al, 2007:2).

In line with the above rationality conception, Schwandt argues that EBP follows an instrumental rationality where the objective of the policymakers is to administer socio-economic affairs “rationally” in an apolitical, scientized manner such that social policy is more or less an exercise in social technology’ (Sanderson, 2002:6).

Generally, EBP stresses on exploring causal relations between interventions and outcomes through observable and testable evidence so that ‘what works’ philosophy can be realized practically. But critics of EBP argue that this view of ‘evidence guiding the policy making process’ is an optimistic view ‘about achieving more direct and instrumental use of research in policy making process’ (Sanderson, 2003:334). Because, non-rationalists often criticise the instrumental rationality concept the way it treats human actions subject to causal explanation through deterministic approach. Whereas, ‘Cartesian Dualism’ suggests that human mind or soul, apart from the physical substance, limits the instrumental explanation of human being; because the immaterial substance (soul) imitate the infinite substance, that is GOD, in a finite way (Ross and Francks, 1998); and thus the human action is beyond instrumental explanation. In similar vein, Schwandt suggests that ‘understanding is not…a procedure

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1 E.g. social institutions, social systems, cultures etc that shape human consciousness and thus influences actions.
or rule-governed undertaking; rather, it is a very condition of being human’ (Schwandt 2000:194). To tackle this issue of non-mechanical side of human mind, anti-rationalists have proposed interpretive or hermeneutic social science approach where it proposes that the ‘social world must be understood from within, rather than explained from without’ (Hollis, 2003:16). Besides, it focuses on understanding meaning of an action than to seek for causes of behaviour. This argument shows that the instrumental ‘what works’ philosophy of EBP may mislead while dealing with human issues.

While exploring various concepts of rationality in social science, it is also relevant to mention Jürgen Habermas’s ‘communicative rationality’, an approach that tried to converge the modern enlightenment rationality and normative philosophical basis to a single integrated theory. According to this theory, the rationality is inherent in the communication process, more specifically rationality is ‘how speaking and acting subjects acquire and use knowledge’; it is not just holding adequate knowledge (Bohman and Rehg, 2007:8). Through ‘competent communicative action’ the actors can reach to a rational mutual beneficial agreement. Here the ‘competent communicative actions’ means the way the parties

seek to reach an understanding about their action situation and their plans of action in order to coordinate their actions by way of agreement

(Outhwaite W., 1994:71)

It is often argued that the task of policy making is to create environment so that it improves communication in order to reduce distortions (Parsons, 2002). But in reality EBP intends to direct the policy process through utilization of evidence; and thus EBP hampers the democratization of the policy process.

Besides the rationality issue, there are other epistemological issues in social science in the way of understanding or exploring social world. For example, philosophy of perception suggests that appearance and reality can have different meaning. Descartes’ view about the perception of reality states that ‘phenomena belong in the mind of the observer’ whereas reality ‘refers to whatever in the universe itself causes the phenomena’ (Hollis, 1995:29). And often these two may not be the same as the meaning hold by the observer can be different than the meaning hold by the natural world. Thus the perception of evidence through an observer may not reflect the true meaning of that evidence. This is also known as perceptual relativism or perspectivism that states that our conscious is subject to our inner norm and value system and thus it influences our efforts to interpret any evidence. More specifically, perspectivism claims that

knowledge is essentially perspectival in character; that is knowledge claims and their assessment always take place within a framework that provides the conceptual resources in and through which the world is described and explained. According to perspectivism knowers never view reality directly as it is in itself; rather they approach it from their own slant, with their own assumption and preconceptions’ (Fay, 1998:72).

In somewhat similar vein relativism also states that all truth is relative in terms of contextual differences. According to this view, rationality of human actions are relative to context, and ‘there is nothing universal about context’ (Hollies, 2003:230). Thus, if all truth or evidence are restricted to their particular context or perception then, the concept of accumulation of evidence through systematic review is contested.

4. Evidence-Based Research Approaches & Epistemological Issues

Due to recent inclination for evidence-based policy making, there have been a shift of research interests towards evidence based approaches, some of which focus on exploration of evidence, especially experimentation; and other focus on aggregation of existing research evidence, especially systematic reviews. From EBP’s perspective, evidence generated by both of these approaches, especially in the clinical sector, are valued as authentic facts

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1 Actors must have knowledge proficiency and competent communicative performance.

2 Systematic review attempts to accumulate or aggregate evidence of previously conducted researches.
and thus these are placed in the apex of ‘hierarchies of evidence’ (Davies and Nutley, 2007:48). Often these approaches are introduced in healthcare sectors; but the logic chain in healthcare sector is much complex than that of clinical treatment and moreover the interventions in health care management is ‘epistemologically complex and methodologically diverse’ (Kouri, 2009:77).

In this section, experimentation and systematic review approaches are analyzed in terms of philosophical and epistemological standpoint in relation with knowledge creation debate in social science.

4.1 Experimentation: A Tool to Explore Evidence
As mentioned above, experimentation or implementation of scientific evaluation is used to identify the causal relation between intervention and changes in the subject. The basic approach of any experimentation is to identify the effects of a particular intervention on the subject. But there are some criticisms of such scientific methodology in social science. For example, it may happen that the apparent effects of a particular intervention may not be the outcome of that intervention because other random or non-random factors may contaminate the result (Davies, Nutley & Tilley, 2007). Practically, it is difficult to set aside other social factors from the subjects because human live in a complex social system and the separation of the subject from that system will distort the total meaning of the research. However, often the control group or comparison group approaches claim to deal with this issue; still it is hard to avoid other biases like Hawthorne effect, spontaneous improvement, contemporaneous change, variation from the results. These biases can weaken the strength of the methodological rigour of the experimentation in social science and hence raises the question about the validity of the evidence produced by such method.

Moreover, critics of experimentation argue that the evidence that is generated by any experimentation in any social issue (e.g. education, criminal justice, social care) is strictly confined to its particular context. Therefore generalization or replication of evidence generated by experimentation is still controversial. However, to assist the policy process, the researchers besides generation of evidence must tell something about generalization and replication of such intervention; because if the intervention is confined to a particular context that would have little use in policy arena. Thus the generalization and wider applicability of particular experimentation results into diverse context is still contested.

4.2 Systematic Review: A Tool to Generate ‘Collective Wisdom’ for EBP Making
Systematic review has emerged as a crucial tool in assessing and accumulating evidence at large scale to guide the policy process. The proponents of systematic review argue that it is hard to find precious examples of evaluation research that lead to ‘retain, imitate, modify or discard programmes’ (Pawson, 2006:7), because the result of the evaluative research usually come after the policy is implemented due to its time consuming nature. Moreover, they suggest that there are so many fragmented researches have been conducted that there are many research studies that have ‘unclear objectives, poor research designs, methodological weaknesses, inadequate statistical reporting and analysis, selective use of data’ and conclusions which are not even backed by relevant references and data (Davies, 2004:2). Therefore, there is a need to assess the quality of evidence, filter out misleading results that is generated due to biases in the primary study, and coordinate these research outcomes in light of relevant interventions (Oliver et al., 2005). However, the systematic review has emerged not as a substitute for evaluation research, rather as a conduit between evaluation research and policy process where it generates a large scale of relevant evidence, pooled from existing evaluative researches, and provide guidelines before a policy implementation takes place (Pawson, 2006). However, there are some issues raised by the critics about its methodology and also about the epistemological stances of its ‘evidence aggregation’ philosophy.

The very basic criticism of any systematic review approach is, they all follow a highly mechanical process in aggregating or synthesizing various research results. The systematic approach starts with forming a clear

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1 *Hawthorne Effect*: Any attention at all to people in a social system is likely to bring about some change. *Spontaneous Improvements*: naturally occurring changes that may be considered as change attributed due to intervention. *Contemporaneous Change*: larger secular trends that may swamp effects from specific intervention. *Variation*: variability of effects between and within individuals and communities. (Davies, Nutley & Tilley, 2007:256).
hypothesis that is to be tested and thus reviewers collect all the relevant published and unpublished researches and systematically decontaminates all the inherent research biases (if any) of the studies and try to synthesize/aggregate the results in relation to the central objective (Young et al, 2002). One of the crucial systematic approaches is the meta analysis that follows such mechanical approach to generate ‘collective wisdom’. But the aggregate evidence generated through these approaches is flawed due to some methodological problems. A very general criticism of this approach comments on its preferences of scientific evidence over normative evidence. But, the policy process cannot succeed by focusing on only scientific and formal knowledge while ignoring the role of practical wisdom and informal tacit knowledge (Sanderson, 2003). Thus, this is a limitation of meta analysis approach that it only considers the scientific evidence as reliable evidence. Moreover, there is controversy about the justification of aggregation of evidence/knowledge as we have discussed earlier that all knowledge is contextual and perceptual in social science. Thus inherently all evidence is heterogeneous in nature and thus the concept of collective wisdom is contested.

Another problem of meta analysis is that it does simplification in every stage of its process:

‘hypotheses are abridged, studies are dropped, programme details are filtered out, contextual information is eliminated, selected findings are utilized, averages are taken, estimates are made’ (Pawson, 2006:42-3).

Thus, it is not possible to reach to the true fact with such simplified approach; rather what we have is a ‘meta equivocation’ or ‘descriptive summary of evidence’ through meta analysis. The simplification or filtration process eliminates a lot of valuable information that are vital to know about the nature of interventions and their effectiveness. Consequently, meta analysis fails to reach to its objective, that is to create advancement of knowledge.

4.3 Realist Synthesis: An Optimistic Method for Systematic Review

Pawson (2006) has introduced the new model for systematic review, the realist synthesis, which he claims, capable enough to deal with the inherent problems of the conventional meta analysis model. Basically, he suggests that realist synthesis is a method not just to accumulate evidence about an intervention, rather it will focus on developing explanations about how and why programmes work. And consequently these information can be utilized while developing, modifying or implementing an intervention. Moreover, this approach will address the contextual issues of different researches; it will transform the traditional ‘does it work?’ question into five dimensional question—‘what is it about this kind of intervention that works, for whom, in what circumstances, in what respects and why?’ (Pawson, 2006:84). Furthermore, from processual perspective, it is an iterative process where new evidence will be analyzed at any stage of the method. And finally, this method put value on all kinds of relevant evidence, starting from scientific evidence to expert opinions or tacit knowledge. Moreover, the production of research synthesis involves both the policy makers and the practitioners in the process because ‘it is their questions and their assumptions about how interventions work that form the focus of analysis’ (Pawson, 2006:100). In short, realist synthesis tries to address all the relevant methodological and epistemological issues of evidence based policy research. However, the whole approach is still in its infancy and evaluation of such approach is yet to be measured in the future. And finally, it is still the link between the ‘evidence’ of the existing researches and the ‘policy process’ but not a primary research tool.

5. Conclusion

The above discussion clearly reveals that the present government’s ‘what works’ philosophy is a major fallacy of their effort to bridge the gap between policy process and social research. There are some inherent methodological and epistemological issues that the evidence-based research faces in the way of understanding the social world. Basically, the critics of EBP warn that the concept of ‘what works’ evidence is myopic, because it defines ‘evidence’ scientifically and mechanically that is too narrow from social science’s perspective.

Moreover, proponents of EBP presume that the policy process can follow a rational decision making process where evidence is the guiding force. This is another wrong conception about the relationship between policy process and the role of the evidence. In general, the relationship between research and policy process is
somewhat indirect in nature. Research does not directly guide the policy process but provides valuable knowledge so that the policymakers can take well-informed decision about any policy. In addition, evidence is just one component of the policy making process, there are other important factors that also influence the policy decisions; such as, ‘professional norms, expert views, personal experience, media interest and politics’ (Nutley et al 2007:14).

As discussed earlier, the vital epistemological concern in social science is the influence of context in understanding or explaining social world. Human lives in a complex system where people ‘do not operate in the mechanistic way assumed by those who contend that knowledge can be managed and systematised’ (Parsons, 2002:51). Similarly, perspectivism, is equally important factor which states that all knowledge is restricted to particular perceptual frame of reference. Thus, due to contextual influence and perspectivism, there is little scope to apply instrumental rationality in understanding social issues. Therefore, any explanation or understanding of social issue must account all the concerned subjective, perceptual and contextual dimensions. Thus the naive expression of ‘what works’ philosophy should stretch itself to ‘what works for whom in what circumstances and in what respects’ philosophy (Pawson, 2006:74).

In any case, the whole argument clearly depicts that the instrumental ‘what works’ philosophy of EBP cannot properly integrate social science or social research into the policy process due to epistemological issues. Unless politicians account the crucial role of evaluative research in understanding social world and take a broader perspective on evidence/knowledge conception, then the ‘Evidence-Based Policy’ will remain as no more than a political rhetoric.

References


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