I. Introduction

Pragmatism is a philosophical position characterized by its specific mode of inquiry, and an account of meaning. Pragmatism was first formulated during the 1870s by Charles Sanders Peirce (Peirce, 1931-1958). The mode of inquiry that is developed in Peircean pragmatism is built on scientific processes, and has the goal of the acquisition of knowledge about the world, and ultimately, an approach to a body of true belief. William James and John Dewey are “second-generation” pragmatists. Each developed a distinctive interpretation of pragmatism, each of which departs from Peirce in certain respects.

In this paper, I will argue that Peirce’s conception of inquiry, knowledge and truth has great strengths. I will argue, further, that with respect to inquiry, knowledge, and truth, Dewey’s development of pragmatism remains consistent with that of Peirce, and that Jamesian pragmatism diverges sharply from Peirce and Dewey. The pragmatism of contemporary philosopher Richard Rorty has elements in common with that of James. Pragmatic theories can thus be divided into Peircean-Deweyan interpretations on the one hand, and Jamesean-Rortian interpretations on the other hand.

This division, however, is contested. Cheryl Misak (2008), for example, sets out a division of pragmatism with Peirce on one side and James, Dewey, and Rorty on the other side, based on their conceptions of truth. Misak writes:

On one side of the divide we have William James, John Dewey, and Richard Rorty who take truth to be connected to the products of actual human inquiry. These pragmatists think of truth as roughly what works for us (James); what is found to be warranted (Dewey); or what is agreed upon among members of our community (Rorty). Misak, 2008, p. 112.
This is a misconception commonly encountered, which can have negative consequences in the interpretation of the results of educational research.

II. Peirce on Inquiry, Knowledge and Truth

According to Peirce, inquiry arises if and only if an experience of genuine doubt arises. The goal of inquiry is to generate a settled state of belief. The only way of reaching belief that remains settled, is, to employ scientific practices of inquiry (Peirce, 1877). The result of proper inquiry is the acquisition of knowledge. Peirce has an objective conception of truth: a statement is true when it states the actual state of affairs. According to Peirce:

… the distinction between reasoning well and reasoning ill was that the former is conducive to the knowledge of the truth, and the later not so, and that by truth is meant something not dependent upon how we feel or think it to be. Peirce, 1932/1994, EE

III. Dewey on Inquiry, Knowledge and Truth

Dewey’s discussion of truth is similar to that of Peirce while those of James and Rorty diverge.

For Dewey, knowledge is re-conceptualized as warranted assertability. What is it that “warrants”, i.e. justifies, an assertion? An assertion is warranted by the inquiry process that culminates in the assertion. What does Dewey mean by inquiry? “Inquiry is the controlled or directed transformation of an indeterminate situation into one that is so determinate in its constituent distinctions and relations as to convert the elements of the original situation into a unified whole.” (Dewey, 1938, p. 104). The inquiry process must have the central characteristics of scientific inquiry.

Inquiry grows out of an earlier state of settled adjustment, which, because of disturbance, is indeterminate or problematic…, and then passes into inquiry proper…; when the search is successful, belief or assertion is the counterpart, upon this level, of redintegration upon the organic level. Dewey, 1938, p. 34.1

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1 This is a technical term which Dewey has termed to indicate the formation of an integrated whole.
For Dewey, the process of inquiry emerges from a previously settled situation which has become disturbed, i.e. problematic. There is no guarantee that the process of inquiry will result in a new “settling” of the situation as an integrated whole. This is the goal of inquiry.

The process of inquiry warrants the resulting belief or assertion. Dewey’s view of inquiry is similar to that of Peirce in that both consider even well-warranted beliefs to be fallible. That is, the settled situation may, once again, become unsettled, which would require further inquiry. Dewey writes that:

[The recognition of what Peirce called “fallibilism”… is something more than a prudential maxim. It results of necessity from the possibility and probability of a discrepancy between means available for use and consequences that follow… Because we live in a world of process, the future, although continuous with the past, is not its bare repetition. Dewey, 1938, p. 40.]

What is, as a result of inquiry, accepted as knowledge, i.e. as warranted assertions, today may be proven false by later inquiry. Fallibility does not signify lack of rigor in the [scientific] inquiry. Fallibility is a necessary deduction from the fact that the means available for use are unlikely to be perfect. Logically, a well warranted assertion is not necessarily true; i.e. truth is not deducible from the warrant of an assertion.

The acquisition of true belief is the goal of the process of inquiry, and a true belief is a belief that corresponds to the world as it actually is (Dewey, 1958). Dewey responded to Bertrand Russell who made the claim that Dewey substitutes warranted assertability for truth. “… my analysis of “warranted assertability” is offered as a definition of the nature of knowledge in the honorific sense according to which only true beliefs are knowledge” (Dewey, 1941, p.
For Dewey the acquisition of true belief requires interaction of the human agent with the external environment.²

What makes a belief warranted is the process of inquiry that is used to develop the belief. Because of the continual nature of events and the relations among events, it is impossible to arrive at 100% true belief about the world. However, over time, through scientific inquiry, beliefs about the world can become more strongly warranted.

Sometimes the use of the word “truth” is confined to designating a logical property of propositions; but if we extend its significance to designate character of existential reference, this is the meaning of truth: processes of change so directed that they achieve an intended consummation…The instrumental objects of science are completely themselves only as they direct the changes of nature toward a fulfilling object. Dewey, 1958, p. 161.

Instrumentality involves utilizing tools to achieve an end. The tools of scientific inquiry are propositions which are accepted because of previous inquiries. Tools of inquiry are evaluated as useful and relevant. But this does not mean that truth is reinterpreted by Dewey as “useful” or “what works for us”. Utilizing the tools of inquiry, conclusions can be reached, which are well warranted to be true. I.e. there are strong reasons to believe that the conclusion is true.

IV. James on Inquiry, Knowledge and Truth

James views truth as that which "works".³ According to James, truth is “…essentially bound up with the way in which one moment in our experience may lead us towards other moments which it will be worth while to have been lead to” (James, 1907, p. 135). To understand James' conception of "what works", one must understand James' view of the connection between truth and belief. “The true is the name of whatever proves itself to be good

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² Deweyan pragmatism sets human agents within nature.
³ For James, what works can be considered as that which seems to be true based on cohering with other bits of knowledge and experience. For example, if A finds that an event has taken place, A discovered that an outcome y occurred, and that A found that z was related to outcome y, then A would claim that it is true that these events and outcomes are accurately interpreted.
in the way of belief, and good, too, for definite assignable reasons” (James, 1907, p. 42). This quote makes clear that, for James, a true belief is one that is good and is good for definite and assigned reasons. For James, beliefs which arise out of anecdotal or correlational relationships are not necessarily true beliefs. For James, a belief "works" if and only if the belief is reasonable and sensible for the individual. It is only beliefs that “work”, in this sense, that are true beliefs. “Beliefs and ideas which do not bring us into satisfactory relations with other parts of our experience would not be considered true.

For James, all that is needed for a belief to be true is satisfactory relations with our experiences. This suggests that James allows for less relational information to be demonstrated for beliefs to be considered true. James’s pragmatic conception of truth is a coherent theory of truth which does not require correspondence with the world as it actually is as a criterion for truth. James’s conception of truth is, according to Misak, a reductive conception of truth. “Truth is an idea upon which we can ride; it is what satisfies us” (Misak, 2008, p. 112). Jamesian pragmatism involves a subjective, affective component. When James uses the term “truth”, he is referring to an individual’s state of satisfaction. This interpretation of truth places a human’s psychological state at the center of the theory of truth, to have a true set of beliefs that makes sense to us and that satisfies us psychologically. This is a coherentist, subjectivist conception of truth. These interpretations differ strongly from Deweyan conception of truth.

V. Extensions to Educational Research

The above discussion considered the different interpretations of truth and knowledge in the pragmatic sense. These different interpretations of James and Dewey have important implications for educational research. Methods textbooks often cite the Jamesian form of

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4 People are in a satisfactory relation with the rest of their experience when the beliefs are non-self-contradictory, i.e. consistent. This, if so, suggests strongly a coherent theory of truth.
pragmatism in their philosophical framework for research methods. It is common in research methods books to present pragmatism in the Jamesian sense. An example of this can be found in well-known texts such as Designing and Conducting Mixed Methods Research (2011) by Creswell. Other research methods books, such as Educational Research: Quantitative, Qualitative, and Mixed Approaches (2012) by Johnson and Christensen, interpret the pragmatic method of inquiry partly in a Deweyan manner and partly in a Jamesian manner. These methods texts open with consideration of the philosophical foundation of research methods, thus, recognizing the importance of the issues. But, the texts fail to provide adequate account of pragmatic philosophy.

These examples demonstrate the importance of a philosophical framework for educational research. Two very different conceptions of truth and knowledge are at issue. The Jamesian interpretation is accepted as standard, when it should not be. Or, in the latter example, Jamesian and Deweyan conceptions of truth and knowledge are inappropriately mixed together. Which form of pragmatism one accepts, can determine the rigor of the research designs. If the goal of educational research is to acquire greater knowledge, then, the philosophical foundation which sets out the nature of inquiry, knowledge, and truth is essential. Interpreting scientific inquiry using Jamesian conceptions has certain negative consequences. These consequences are: lesser standards needed to demonstrate knowledge, a reliance on subjective feelings and interpretations to explain truth, and unmerited confidence in the demonstration of knowledge. However, if the goal of research is to capture the world as it actually is, i.e. to make true statements about the world, then Deweyan pragmatism is required.

Dewey’s conception of scientific inquiry is built upon a correspondence conception of truth. Given this conception of truth, the statements about the world that conclude the inquiry
are understood to be warranted as objectively true. James’s conception of scientific inquiry is built upon a coherentist conception of truth. Reliance on this conception means that the statements that conclude inquiry are statements of subjective satisfaction. What difference does it make which conception is adopted? The difference lies in the interpretation of the nature of results of the inquiry. Accepting Dewey’s view, the results of the inquiry are interpreted as likely-to-be-true statements about the world. Accepting James’s view, the results of the inquiry must be understood as subjectively satisfying to the researcher.

**VI. Concluding Remarks**

In this paper, I have examined pragmatic conceptions of inquiry, knowledge and truth. In the Deweyan sense: inquiry is a process which requires rigor in the scientific manner; knowledge is conceptualized as warranted assertability; and truth is that which has been found to correspond to the world as it actually is. I have outlined the ways in which James and Dewey differed in their conceptions of these concepts. I concluded by considering implications to educational research. Researchers are free to choose whichever philosophical framework they wish to support and guide their studies. If researchers rely on a pragmatic philosophical framework, I have argued that reliance of Dewey’s conceptions rather than James’s would enable the conclusions of inquiry to be interpreted as knowledge of the world.
References


