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Epistemological beliefs: Issues for marketing educators

Introduction

While considerable attention has been paid to epistemological issues in relation to marketing and consumer research (Anderson, 1986, 1988; Easton, 2002; Hunt, 1991, 1992; Kavanagh, 1994), epistemology does not figure as a matter of concern in the literature on marketing education (Abernethy & Padgett, 2011; Brennan, 2013; Urbancic, 2009). However, there is considerable evidence that students' beliefs about the nature of truth and knowledge —their epistemological beliefs—are a matter that should be of concern to university educators (Hofer, 2000, 2001). Further, in this paper we argue not simply that students' epistemological beliefs (EBs) should be of concern to university marketing educators, but that in the field of marketing *in particular* students' EBs are a matter of concern. In short, this is because of the nature of marketing and marketing education; a discipline in which fundamental epistemological questions remain unanswered and may be unanswerable, and a field of academic and professional practice where sensitivity to epistemological issues is particularly pertinent.

The fundamental arguments developed in this paper are that epistemological beliefs (EBs) *matter* in marketing education; that there are good reasons to suppose that there are systematic differences in EBs between marketing students, marketing educators, and marketing practitioners; and, that marketing students could be better prepared for employment or self-employment if EBs were considered explicitly in the design of the university marketing curriculum. Since EBs have not previously been developed as a theme within the field of marketing education, the principal goal of this paper is to establish that EBs are a legitimate and important research topic in this domain. This goal will be pursued by reviewing literature on EBs published both in the field of educational psychology and in educational research in other disciplines.

The central thesis

In common with other philosophical concepts, such as beliefs about ontology and ethics, EBs have a "common sense" or taken-for-granted quality. Consequently, they are likely to remain un-examined and un-challenged unless mechanisms for examining and challenging them are built into the curriculum. While later we will consider more formal definitions of EBs, for the moment consider that they are concerned with "how we know what we think we know". Reasonably, the majority of people most of the time give this issue little thought. Buehl and Alexander (2001, p388) argue that epistemological beliefs generally remain "submerged" and that people often lack the language with which to articulate them. In addition, most people exhibit relatively unsophisticated EBs; usually implicitly, they believe that knowledge is relatively objective, fixed and certain, and where it goes beyond what they personally know it is safely contained in the minds of experts and authorities. It is likely that the EBs of many marketing students are of this type; they consider marketing educators and marketing practitioners as the repositories of the objective, fixed and certain knowledge about marketing that they wish to learn. Clearly, however, many marketing educators would disagree with this characterisation of marketing knowledge (Brownlie, 2006; Rossiter, 2001). University academics exhibit more sophisticated beliefs about epistemology than people with lower levels of educational attainment. Consequently, while the student may wish to see the marketing educator as a reliable source of fixed marketing knowledge, educators probably do

not believe that marketing knowledge can be characterised in this way, and do not see themselves as infallible.

When the relationship with marketing practitioners is added, things become more complex. Marketing practitioners are in the business of making persuasive arguments, whether to members of the general public (in consumer marketing) or to other business professionals (in business-to-business marketing). The construction of persuasive arguments clearly depends on having a good understanding, whether implicit or explicit, of the EBs of the target audience. If the target audience has unsophisticated EBs, which is likely to be the case for much consumer marketing, then it makes sense to present persuasive arguments in the form of authoritative statements based on apparently certain knowledge. Yet in their professional lives marketing practitioners increasingly have to make decisions based on the systematic analysis of data. Marketing metrics and data-driven marketing are increasingly important within the profession (Mintz & Currim, 2013; Seggie, Cavusgil, & Phelan, 2007), and they raise particular problems for the marketing curriculum (Pilling, Rigdon, & Brightman, 2012; Saber & Foster, 2011). Consequently, as embryonic marketing practitioners, marketing students need to be aware that they may need to make simple appeals to authority in their marketing communications, yet have a subtle appreciation for the nuances of evidence in their professional lives when interpreting marketing data. While the marketing educator, and the marketing professional, may have developed the skill of switching easily between these perspectives, it is likely to be something that the marketing student finds more difficult.

The nature of epistemological beliefs

EBs concern conceptions of the nature of knowledge, how it is structured, verified, justified, and argued. For 45 years researchers have investigated EBs and their impact on learning and learning outcomes using qualitative and quantitative approaches. From this research the following dimensions of EBs have emerged: certainty of knowledge; complexity of knowledge; source of knowledge; justification for knowledge.

Each dimension varies in terms of degree of naivety and sophistication. For example, in terms of the *complexity of knowledge*, a more naïve view sees knowledge as having a simple structure largely made up of lists of unrelated facts; a sophisticated view sees knowledge as complex with rich and numerous interconnections. Those with a more naïve view see the *source of knowledge* as a form of authority, for example, the teacher or the textbook, and believe that those in positions of authority either know or can get to the truth of any issue or problem. Students who hold such views tend to be dependent on the teacher or textbook for learning; those with more sophisticated views accept that they must also observe, experiment, or consider ideas themselves in order to understand and learn.

EBs develop over time. At certain learning stages students will struggle with more complex learning tasks such as advanced problem solving and critical thinking. Most undergraduate students find it difficult to acknowledge the relative merits and justification of different points of view. Those who have undertaken advanced levels of postgraduate education (such as university academics) are able to do so with relative ease (Hofer, 2001). Hence it is likely that there are differences between the EBs of undergraduate students and their lecturers, which should be taken into account in planning the learning design, the teaching approach and the expected learning outcomes.

Epistemological beliefs, learning and teaching

With respect to learning design, teaching, and learning outcomes, research into EBs has investigated a number of themes including the strategies students apply to learning tasks; their motivation to continue trying when learning appears difficult; their ability to change and adapt their current understanding (conceptual change); whether they will seek to simply 'pass the test' or to increase their overall competence; and, their actual performance on learning tasks. For example, students who see knowledge as simpler and more certain tend to perform less well overall on all kinds of assessment, and those who seek simply to pass the test may believe that additional effort is unlikely to improve their outcomes and that failure is unavoidable and beyond their control (Duell & Schommer-Aikins, 2001; Kardash & Scholes, 1996; Rukavina & Daneman, 1996).

Researchers such as Hofer (2001) and King and Kitchener (2004) who have demonstrated that EBs develop over time, have also shown that at certain stages of learning students will struggle with more complex learning tasks such as advanced problem solving and critical thinking. Pascarella and Terenzini (1991) show that while some undergraduate students can progress to weighing evidence and distinguishing between weak and strong arguments, few are able to recognise the assumptions or identify inferences underlying an argument. The latter abilities are what we commonly refer to as components of critical thinking – a process or set of process that most University lecturers would argue are the main purposes and outcomes of undergraduate teaching and learning. Hofer (2001) has also demonstrated that most undergraduate students are weak in their ability to weigh the value or merits of different points of view or in understanding the means by which these views can be tested against evidence or how they have been justified. These qualities of thinking come with the additional years of formal and advanced education that most university academics have undertaken. It is this training and experience that also allows academics to take on more sophisticated epistemological beliefs over time.

Kuhn (2001), who has undertaken considerable research into how critical thinking skills develop over time, argues that EB's influence a student's intellectual values and therefore their disposition (rather than ability) to undertake the intellectual effort needed to think critically. Spiro et al. (1996) support Kuhn's argument that EB's make some individuals more predisposed to learning in complex and ill-structured learning domains while others prefer knowledge and knowledge acquisition that is simple and orderly. While they do agree that EB's can develop over time, they argue that individuals tend to come to higher education with prefigured epistemic world views that determine the degree to which they can handle complex learning tasks. They further argue that having a 'reductive world view', or a predisposition to an orderly and simple view of knowledge and knowledge acquisition will influence their choice of subject and/or domain. A 'belief in the orderliness and teleological homogeneity of phenomenon' (p. 51) will lead these students to choose areas of study that are more structured where 'strategies of analytic decomposition and compartmentalization'(p. 52) are at least initially helpful to the learning process (Spiro et al, 1996). This reductive world view not only leads them away from more complex and ill-structured domains but also acts as a barrier to their learning in these domains. The issue of whether marketing students perceive the learning domain to be one where knowledge is simple and orderly or one that is more complex and ill-structured is un-researched. However, it is important since marketing practitioners have to deal with large amounts of data that are complex and ill-structured.

Epistemological beliefs and the marketing curriculum

Students do not have to become marketing practitioners in order to experience challenging, complex problems. Indeed, marketing education presents students with many examples of issues, concepts and theories that are ill-structured, contentious, and inconclusive. These issues require careful thought, analysis, interpretation and evaluation if even tentative conclusions are to be drawn about their meaning, value, consequences, and/or usefulness. They also require a willingness on the part of students to conduct further research, gather additional information and interpret that information before they can feel confident about their understanding.

Illustration 1 provides examples of more challenging and inconclusive marketing ideas which can be used to illustrate the assertion that marketing knowledge is nuanced, complex and contested.

Illustration 1: Examples of challenging and inconclusive marketing ideas

Marketing orientation and its contribution to firm performance (Hooley, Greenley, Cadogan, & Fahy, 2005).

Interpreting the impact of environmental factors on marketing strategy (Wilson, 1999).

Selecting appropriate segmentation variables and the challenges of implementation (Dibb & Simkin, 1997).

Measuring the impact of promotional expenditure on qualitative brand dimensions such as image, awareness, loyalty (Aaker, 1996).

Approaches to developing strategy and their effectiveness in achieving (marketing) objectives (Mintzberg & Westley, 2001).

Developing and maintaining a sustainable competitive advantage (Barney, 2002; Coyne, 1986).

Ethical issues such as determining responsibility the sale and purchasing of counterfeit products (Eckhardt, Belk, & Devinney, 2010).

According to research by Schommer (1990), King and Kitchener (2002) and Kardash and Scholes (1996), students' epistemological beliefs help to predict their performance on interpretation and comprehension tests; the degree to which they are willing to engage in 'complex effortful thinking' (Kardash & Scholes, 1996, p. 263); and, whether they are willing to accept uncertainty until further evidence has been found (Schommer, 1990). Consequently, the epistemological belief dimensions of certainty, complexity, source, and justification of knowledge can help tutors to identify whether some students will be satisfied with a simple answer to these more complex marketing issues, whether particular sources such as the tutor or a textbook will be seen to provide sufficient expertise/evidence on the issue, and students' willingness to expend effort in seeking out all available positions and sources. With increased understanding of where their students sit along these epistemological dimensions, the tutor is better able to provide support and guidance.

Illustration 2 provides an example of the type of student exercise that requires considerable investigation across a range of sources in order to draw appropriate conclusions.

Illustration 2: A sample exercise

Consider advertisements for cosmetic anti-aging products. They often make claims that after a period of time, the product will make the customer look years younger, or that it will reduce wrinkles, reverse the signs of aging and/or change the quality of the skin. Examples of such claims are provided below:

"Look more than 10 years younger in 4 weeks" Estee Lauder 'Time Zone'

"One drop instantly transforms skin quality" L'Oreal 'Youth Code'

"Apply the daily anti-ageing day cream face cream every morning and evening to reveal velvety smooth-feeling, younger-looking skin". Lancome 'Genifique'

'Works with your body to produce younger skin' Lifecell

Other advertisements make reference to innovative technologies and/or the use of statistics from surveys from a sample of customers to support their claims:

"So powerful that more than half of women considering a cosmetic procedure said they would delay it*" (*Tested on 118 women considering lasers, fillers, peels). Lancome 'Visionnaire'

'[Intercepts] future aging signs to dramatically improve the look of sun-damaged skin. It's formulated with advanced Idebenone technology, the most powerful antioxidant available today*, which achieved an EPF® rating of 95. In addition, PREVAGE® Anti-Aging Daily Serum achieved the following results in our latest clinical test****:
- 80% improvement in radiance and brightness.
- 70% improvement in skin tone.
- 69% improvement in the look of photo-damaged skin.
- 69% improvement in skin's overall appearance

****12 week trial on 32 women aged 25-65

Elizabeth Arden Prevage

Have the students analyse these claims to determine:

1. Whether they meet or breach current advertising codes, such as the UK advertising codes (https://www.cap.org.uk/Advertising-Codes.aspx)
2. The degree to which they are supported by evidence;
3. The quality of the evidence provided.

To address these questions in depth and detail, students would need to refer to literature on statistics and sample size, the medical literature where randomised control trials have investigated the efficacy of these products in achieving their claims, and also information from relevant advertising standards authorities.

Conclusion and further research

The principal purpose of this paper has been to develop the argument that marketing educators should give explicit thought to EBs during the curriculum design process. While this might be seen as a generic issue that is of no greater or lesser importance for marketing students than those in other disciplines, we argue that because of certain particular epistemological complexities the development of greater sophistication of EBs is particularly important for those considering marketing as a career. Even without going into the wider academic disputes about epistemology in the field of marketing, (Anderson, 1986, 1988; Easton, 2002; Hofer, 2001; Hunt, 1991, 1992; Kavanagh, 1994), we have proposed that a better understanding of the comparative EBs of marketing students, academic staff, and practitioners would contribute to better curriculum design.

Based on current knowledge it is possible to argue, in general terms, that the explicit consideration of EBs during the curriculum design process would facilitate the incorporation of techniques for developing greater epistemological sophistication among marketing graduates. However, many questions remain to be resolved before this general idea can be effectively put into practice. Generally, the question of *how* to incorporate epistemological development into the marketing curriculum merits further research. For example, experiential approaches to learning have many advocates in marketing and more widely (Ackerman, Gross, & Perner, 2003; Ardley & Taylor, 2010; Inks, Schetzle, & Avila, 2011; Kolb & Kolb, 2005); these advocates would probably argue that the teaching and learning methods they propose will lead to greater epistemological sophistication, while didactic methods will not. This plausible proposition merits empirical testing, since the claims made for experiential education have not always proved to be supported by the evidence (Brennan, 2014).

In addition, the question of *why* to devote greater attention to EBs also merits attention. In this paper we have provided a *prima facie* case for the advantages of greater epistemological sophistication. Clearly, more needs to be done. For example, does enhanced epistemological sophistication among marketing graduates lead to improved on-the-job performance, and if so, how? One might expect that the marketing graduate with greater epistemological sophistication would be more questioning of the results of market research studies, for example, rather than treating marketing research results as an objective representation of the 'real world'. We also expect that a marketing graduate with more sophisticated EBs would find it far easier to compartmentalise between claims that are made in marketing communications campaigns (where those are designed to appeal to consumers with relatively unsophisticated EBs) and the evidential basis required to make marketing management decisions. However, these assertions are in need of empirical investigation.

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