Causality in Islamic marketing research

Building consistent theories and stating correct hypotheses

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Abstract

Purpose – Highlighting the need for a profound move towards desecularisation of Islamic scholarship, this conceptual paper aims to clarify the concept of causality from the Islamic marketing research perspective and extends a number of suggestions for improving theory building and hypothesis development in the field.

Design/methodology/approach – The approach taken is largely conceptual. In addition, this study collates the stated hypotheses in the articles published in this journal in the past five years and analyses the structure of causal statements to uncover key tendencies.

Findings – The review of historical and current views on causality indicates that most commentators agree that assuming the existence of the necessary connection between cause and effect is misleading. The Islamic traditions based on occasionalism and modern science agree that causal statements reflect, at best, probabilistic assumptions.

Research limitations/implications – This paper offers a number of insights and recommendations for theory building and hypothesis development in Islamic marketing. By following the occasionalism perspective and the notion of Sunnah of Allah, researchers will be able to build methodologically coherent and genuine Islamic marketing knowledge.

Practical implications – Correctly stated and tested hypotheses can be used by public policymakers to enforce effective consumer and market policies.

Originality/value – This paper tackles a complex issue of causality in Islamic marketing research which has not hitherto been discussed well in the literature. This research is also a unique step towards developing pioneering avenues within the domain of Islamic marketing research methodology.

Keywords Desecularization, Methodology, Theory, Causality, Hypothesis development, Islamic marketing

Paper type Conceptual paper

1. Introduction

Modern societies are on the brink of "causal revolution" (Pearl and Mackenzie, 2018). The developments in artificial intelligence, machine learning, marketing analytics and big data ignited a renewed interest in deeply human qualities such as causal reasoning and causality inference (Pearl, 2019; Varian, 2016). Most researchers, specifically when developing theories based on testable hypotheses, may not reflect on causality assumptions underscoring their

research reasoning. Because causality assumptions are profoundly cultural (Bender and Beller, 2019), not all implicit causality assumptions may fit the principles of Islamic marketing scholarship (Kadirov, 2014; Wilson, 2012a; Wilson, 2012b).

Causal reasoning is part of the research methodology. Scholars in Islamic marketing would greatly benefit from engaging in thorough clarification of research methodologies used for research (Wilson, 2012b, 2012c). The research term "methodology" refers to the guiding principles of research. If the guiding principles of research (including corresponding research methods) fail to echo the fundamental, ontological and epistemological tenets of Islam, derived research outcomes may end up being neither valid nor relevant. The methodology is often a "blind spot" of research. Not all researchers may question the methodological principles used in their research projects. Specifically, contradictions may arise if research in Islamic marketing is driven by methodologies underscored by secular, and in some cases atheist, ontological values.

Muslim researchers need to engage in comprehensive self-critique (Jafari, 2012; Wilson, 2012a). The danger of "sacralisation" – thinking that one's interpretation of Islamic knowledge is superior or beyond critique just because one engages in religious deliberation – is as real as never before (Jafari, 2012). Not all research results, just because they may come under the label "Islamic", maybe commensurable with the humanising focus of Islamic thought that has evolved for centuries. One of the problems one often encounters is unreflective orthodoxy, often camouflaged as "the only true Islam", grounded in radicalism and ignorance. Jafari (2012) states that:

> Critique is a key element of the advancement of knowledge. Critique questions taken-for-granted assumptions, problematises understatements and overstatements, generates further ideas, establishes dialogues, and fosters reflexivity. It is an invaluable conduct which seeks clarifications of ontological, epistemological, and methodological positions and procedures. JIMA [*Journal of Islamic Marketing*] contributors need to practise this scholarly tradition in all matters (Jafari, 2012, p. 27).

An initial step in self-critique is the scrutiny of own methodology. Is it possible that sacralisation is the result of incommensurable methodologies used to inform Islamic marketing research projects? If the methodology used is grounded in colonial, secular or atheistic dogmas, knowledge or insights derived from the research based on this methodology may be significantly misleading. As an analogy, Linda Tuhiwai Smith's (2013) discussion of the need for decolonising methodologies is informative. She argues that an assailable chasm exists between colonial methodologies (which some researchers accept as the only principles which underlie the "scientific" method) and alternative indigenous methodologies emphasising spirituality, community, care, sense of belonging and guardianship. In the same spirit, this paper calls for desecularising methodologies in the domain of Islamic marketing. It must be noted, however, that the process of transforming current Islamic marketing research methodologies through desecularisation is a broad agenda that would require painstaking effort in the long-term (Wilson and Liu, 2011; Wilson, 2012a). Desecularisation does not imply falling back into a silo mentality (Wilson and Grant, 2013), rather this process should involve an application of the latest developments in methodological research.

The current investigation specifically considers one of the important methodological issues, that is, causality and causal reasoning (Waldmann, 2017). An analysis of causality hinges on the ontological focus of, "What is causality?" and the epistemological enquiry of, "How do we know causality was present?". This paper will offer a review of causality theories from both the secular and Islamic perspectives. An in-depth understanding of the concept of causality is important for developing relevant theories about marketing

phenomena because understandings of causality appear to be dependent on one's cultural background (Bender and Beller, 2019). For example, throughout centuries Muslim jurists debated the importance of "illa" (the efficient cause) versus "hikmah" (wisdom) in deriving qiyas based formulations of market options (e.g. *riba* versus bank interest, money versus currency, halal and haram, permissible and impermissible). The recent ruling on *riba* and bank interest by the Shariah Appellate Bench of the Supreme Court of Pakistan explicitly draws on "illa", the concept of the efficient cause borrowed from Aristotelean logic in justifying its ruling on bank interest. Hence, scholarly debates, societal discourse, public policy and consumption decisions, including the very understanding of a specific phenomenon representing or not representing the subject matter of Islamic marketing (e.g. halal bank services), may significantly hinge on how causality and causal relationships are conceptualised.

The focal questions guiding this investigation are as follows:

- What is the meaning of the argument "X causes Y" from the perspective of Islamic marketing? What is the meaning of a hypothesis which, for example, may claim that an advertisement portraying Islamic values *causes* increased sales in Muslim majority markets?

- How do we discover causality? How do we know that a causal relationship is operative? For example, can one really prove that Islamic advertising has a causal association with product sales? Is the aforementioned meaning of a causal relationship compatible with the established traditions of Islamic thought?

- Is uncritical adoption of the mainstream understanding of causality from the domain of secular methodologies a problem? If yes, how can this be rectified?

- How can researchers develop relevant Islamic marketing theories and state hypotheses in a congruent manner?

2. Theories of causality in social sciences and marketing

Explanations focusing on "why" tend to involve causal inferences (Pearl and Mackenzie, 2018). Causal statements are advanced not only to explain observed phenomena (events, processes, forms) but also to make predictions regarding expected changes under specific conditions (Domegan *et al.*, 2017). For example, an observed increase in product sales in a Muslim market can be explained having recourse to a new advertising campaign portraying Islamic values. This explanation also suggests a recipe for action in the future: developing and introducing an Islamic advertisement would be expected to lead to an increase in sales in Muslim markets. Another example comes from Koku and Savas (2014), who state that, "Organizations that operate according to the tenets of Islam will, on average, perform better than those that do not". Here, it is proposed that a variation in organisational performance can be explained through Islam-congruent operations. This hypothesis also predicts that in the future, organisations would be able to attain superior organisational performance by following the tenets of Islam. In what follows, we offer a general discussion of how the scholarly understanding of causality evolved throughout the centuries.

It is well known that metaphysics of causality was the focus of ancient philosophical debates. To explain objects and processes in nature, Aristotle proposed four types of causes which could be used in combination with each other to address "why" questions (Falcon, 2019). According to Aristotle, the *material cause* reflects the transformative makeup, essence or fabric of an object, whereas the *formal cause* refers to its form or shape. The *efficient cause* points at processes and/or mechanisms through which it takes its shape, whereas the *final*

cause assumes the existence of the object's "telos", i.e. its ultimate purpose. Aristotle militated against the position of other philosophers who accepted the validity of only the material cause or the efficient cause. Aristotle's aim was to defend his argument concerning the significance of the final cause in developing valid explanations of natural phenomena (Falcon, 2019).

Throughout the centuries, philosophers in the West debated about the exact meaning of, "X causes Y" which can be symbolised as *X-c-Y* (Brady, 2011). David Hume (1711-1776) opposed the assumption of "c" representing some kind of power or hook, i.e. inherent power in the cause that necessarily creates the effect. Hume shows that "necessity" cannot be assumed because it is observers who construct "c" mentally through observing some kind of regularity through which X continuously precedes Y. Other thinkers, including Bertrand Russell and Karl Pearson, emphasised regularity in the form of correlation as the main sign of causality. Brady (2011) reviews the evolution of thinking about causality in the West distinguishing four approaches:

(1) *The Neo-Humean perspective*: It focuses on regularity, correlation and temporal precedence. For example, the occurrence of X is *regularly linked/temporally precedes/correlated with* the occurrence of Y.

(2) *The counterfactual perspective*: It focuses on alternative worlds and possibilities. The assumption here is that in a similar world if X occurs, Y will occur or vice versa. Alternatively, if X does not occur, Y will not occur, or vice versa.

(3) *The manipulation perspective*: It focuses on purposeful manipulation (e.g. experiments to address whether manipulating X, for example, "switching" it on/ off, would create any change in Y).

(4) *The mechanisms and capacities perspective*: It investigates the inner workings, processes and mechanisms of "c", whereby attempting to answer, "What is the mechanism through which X may cause Y?"

If the regularity approach attributes the causality to specific conditions (this perspective is called "causation-as-regularity") (Psillos, 2009), the counterfactual and manipulation approaches, in contrast, attribute causality to choices under the agent's control (this perspective is called "causation-as-manipulation") (Brady, 2011). For example, the former would attribute a sales increase to the features of an advertisement which reflect Islamic values (e.g. the regular use of Islamic values in advertising leads to the upward sales trend), whereas the latter would attribute a sales increase to the purposeful, strategically-driven design and selection of Islam-congruent advertisement copies. Differing from the aforementioned meanings, the "causation-as-force" perspective assumes that X has a kind of "force" that drives or propels Y (Lakoff and Johnson, 1999). The mechanisms approach reflects such symbolism focusing on inner properties of causal events.

Researchers also discussed the necessity and sufficiency conditions of causal effects (Brady, 2011). X is considered as the sufficient cause of Y when the presence of X leads to the subsequent manifestation of Y. In contrast, X is considered as the necessary cause of Y, when the presence of Y is accepted as evidence for the prior occurrence of X. Based on this logic, one would realise that Islamic advertising is neither the sufficient cause nor the necessary cause of an increase in sales in Islamic markets. The existence of Islamic values in advertisements may not be sufficient for automatic increases in sales. In the same vein, a sudden increase in sales for a particular product may not imply the necessary existence of Islamic elements in advertisements. To solve such logical problems, Mackie (1965) introduced the concept of INUS (insufficient-necessary-unnecessary-sufficient) conditions.

This means that X is the cause of Y when it is the insufficient but necessary part of the third condition Z, which in turn may represent the unnecessary but sufficient cause of Y. This formula is indicated below:

$$X_{necessary}^{insufficient} \rightarrow Z_{unnecessary}^{sufficient} \rightarrow Y$$

In our example of Islamic advertising, one may argue that *viewing and apprehending* an Islamic advertisement by consumers represents this third factor Z. Accordingly, viewing the Islamic advertisement (Z) implies the necessary existence of X (the process of developing, design and application of Islamic advertisements) because viewing would not be possible if these advertisements were not developed or introduced by the firm. However, the introduction of an Islamic advertisement copy (X) may not be sufficient for the creation of enough views or engagement by the market (Z). The act of viewing the Islamic advertisement (X→Z) in itself is not necessary for the occurrence of an increase in sales. Nevertheless, this combination is sufficient for the occurrence of an increase in sales, subject to the absence of other sufficient combinations of potential causal factors. The last detail is of crucial importance here because the causal effect can only be affirmed if other potentially sufficient causes are either constant or accounted for. To sum it up, the INUS conditions framework means that the introduction of Islamic advertising can be considered as the cause for the increase in sales, only if it can be established that, *ceteris paribus*, i.e. keeping all other potential causal combinations constant, the target market really viewed and understood the advertisement. This route to the formulation of causality implies the knowledge of potential causes.

Lewis (1973a, 1973b) proposed an alternative epistemological approach for determining causality. His counterfactual approach states that X can be considered as the cause of Y, if the occurrence of X leads to the occurrence of Y, whereas at the same time in a similar "world" the absence of X would lead to the non-occurrence of Y. To satisfy this logic, one must argue that the introduction of Islamic advertising should lead to an increase in sales in Islamic markets, whereas the absence of the Islamic advertising (or the presence of non-Islamic advertising) in a similar comparable "world" should lead to a weaker or no change in sales. The challenge here is to identify the most similar world for comparison. Recently, scholars argued that causal inference, specifically, the counterfactual approach, is best suited for dealing with impediments to the effective use of marketing analytics and machine learning techniques (Pearl, 2019; Varian, 2016).

Another relevant point to note is the distinction between the deterministic and probabilistic accounts of causality (Pearl, 2009). The conventional approaches reviewed above tend to be deterministic, i.e. they are based on the assumption of lawlike regularities. However, in social sciences including marketing, most relationships tend to be fraught with uncertainties (Domegan *et al.*, 2017). The probabilistic causation approach refers to concepts such as antecedents (the cause) and consequences (the effect) while assuming that given fundamental uncertainty in a particular situation, an antecedent (X) makes the occurrence of a consequence (Y) more (less) likely. Probabilistic causation deals with the problem of inexplicable exceptions that are very hard to deal with from the deterministic perspective (Pearl, 2009). Most statistical models assume probabilistic causation. In time-series analyses, the notion of Granger causality refers to a probabilistic association between the lagged values of X and the future values of Y (Granger, 2004). Some findings based on the Granger causality approach highlighted the deep chasm between the statistical association and true causality. For example, researchers reported the "discovery" of such trivial Granger-causality associations as the positive impact of the marriage rate on the divorce rate or an increase in

the number of "Facebook page likes" causing an increase in the number of "Facebook page unlikes" (Srinivasan *et al.*, 2016). Moreover, probabilistic methods might lead to wrong assumptions in the context of big data and machine learning which are more likely to generate spurious associations (Kupor *et al.*, 2019).

Focusing on marketing theory, Hunt (2010) reviewed two perspectives for understanding causality, namely, power-based assumption (causation-as-force) and sufficiency condition assumption (the INUS model). Focusing on the latter one, Hunt (2010) argued that one must establish at least three evidences of causation in marketing research, namely, temporal sequentiality, associative variation and nonspurious association. Applying these concepts to our example, the researcher can only be sure that Islamic advertising is the cause of an increase in sales if the following three facts are established:

(1) The introduction of Islamic advertising precedes the instance of a sales increase (regularity).

(2) Changes in the degree of Islamic advertising (assuming these changes can be measured) cause consistent changes in sales (correlation).

(3) There are no other competing factors which may cause changes in sales.

Hunt's (2010) approach represents a linear causality assumption (Byrne and Callaghan, 2014; Domegan *et al.*, 2017 Abbott,1988; Boje *et al.*, 2017). Moreover, researchers note that the linear causality assumption is the result of the general linear reality worldview (Abbott, 1988; Boje *et al.*, 2017). General linear reality assumes the world to consist of fixed entities with variable attributes where one causality pattern exists at a time (Abbott, 1988).

Recently, a number of studies focusing on complexity and dynamic systems contrasted linear causality to non-linear causality (Byrne and Callaghan, 2014; Domegan *et al.*, 2017) or spiral causality (Boje *et al.*, 2017). Linear causality assumes unidirectionality and simplicity, whereas in reality "sales" might represent the outcome of a messy, ill-defined, wicked problem within a marketing system that is emergent, interactive, dynamic, complex and highly unpredictable (Domegan *et al.*, 2017). A simpler version of non-linear causality is circular causality that arises as feedback loops between sales and advertising (Tsoukas and Cunha, 2017). Recent research shows that sale is more likely to drive advertising (Darrat *et al.*, 2016). Refuting the general linear reality worldview, spiral causality is based on the assumption that the world consists of a multiplicity of processes of spiralling that involves fluid entities and different unique causal events and pathways (Boje *et al.*, 2017).

Next, we discuss the historical Islamic perspectives on causality and show that Muslim scholars and thinkers adopted varying approaches to causality. We found that the main Islamic theological schools dealt with the issue of causality in different discursive contexts and out of different considerations.

3. Islamic perspectives on causality

3.1 The Hikmah School of causality

For centuries, Muslim scholars took diverse positions on causality using the Arabic signifier *'illa* to indicate "cause" and *malool* to signify "effect". A group of Islamic philosophers known as the Hikmah School heavily borrowed from Aristotelian philosophy, especially the idea of "objects" having Aristotelian "nature" that is observable and constant. Largely focusing on the Aristotelian concept of necessary causality, these *hukamaa* (philosophers) divided causes into two categories, namely, complete and incomplete (al-Abhari,1262/2011). The notion of the complete cause (*'illa taama*) signified the necessary cause, whereas the incomplete cause (*'illa naaqisa*) meant the insufficient cause according to the modern

terminology. Following Aristotle, the school subdivided incomplete causes into four categories, namely, the material cause *('illa maadi)*, the formal cause (*'illa soori*), the efficient cause (*'illa faai'li*) and the final cause (*'illa ghaai'i*). They further argued that the complete cause can be a mix of different incomplete elements. There was a realisation that the effect under focus can come about, or not come about (reminds the notion of probabilistic causation) in which case it would need another cause to come into existence. However, they indicated that the existence of an entity did not negate the absence of the cause, because an entity – when it comes into existence from non-existence – can only be the result of either the active cause or the removal of a preventive cause, the disappearance of which caused the existence of the entity. An interesting concept here is the *preventive cause*. Applying this insight to the example of Islamic advertising, one may realise that an increase in sales can be equally attributed to the introduction of an Islamic advertisement copy or the removal of non-Islamic elements from this copy. Here, the assumption is that an effect implies the necessary existence of the driving cause, whichever form it may take. This view is at the heart of the *necessity thesis*.

Avicenna (987-1037), as a prominent representative of the Hikmah School, strongly defended the necessity thesis as well as the primacy of the final cause. Although the former created strong objections on the part of other Muslim philosophers, the latter opened up fruitful avenues for the discussion of purposefulness. This notion is linked to the view of divine creation. From the Islamic perspective, this is a welcome turn since the teleological argument can be linked to Allah's Subhanahu Wa Ta'ala (SWT) creation and signs. Moreover, purposefulness can be analysed in the context of complex systems and their evolution, specifically concerning the formation and growth of marketing systems (Kadirov and Varey, 2011; Kadirov, 2018). As centuries went by, direct alternatives to the Hikmah School's causality discourse were not presented by other Muslim philosophers, except in theological debates where various schools offered divergent and conflicting theories of causality that were largely reflective of larger theological issues they were grappling with. The theologians, almost inadvertently, offered alternative theories of causality and did so in contexts far removed from that of scientific research. Yet, these positions formed the basis for latter philosophical formulations that sought to discredit the Hikmah School. These debates largely focused on the necessity thesis: does the occurrence of Y imply the necessary causal impact of X?

3.2 Theological (Kalam) perspectives on causality

Theological thinkers' (*mutakallimun*) positions and rationale are couched in theological terms, yet outlining these opinions is important, especially in the context of understanding their philosophical refutation of the Hikmah School's position. The Mu'tazilite school argued that when God creates an entity, the characteristics of that entity come into being, naturally and necessarily. In other words, they insisted that God does not create the characteristics (or effects) separate from the entity. Rather the effects are so ingrained in the item that it requires no further acts of creation. For example, when God created fire, the effect of burning was automatically and necessarily created because burning is the necessary quality of fire. This equals to an assumption that Islamic advertising itself contains a natural effect of sales increase, as though the function of Islamic advertising was originally created by Allah (SWT) to sell more products in Muslim markets. Such a proposition would be very hard to defend because Islamic advertising is a social phenomenon rather than a natural one. The Mu'tazilite school also emphasised human agency as something that has power on its own to cause effects. Mu'tazilite scholars argued that human actions and choices can be considered as the cause (X) that would lead to

expected happenings (Y). This position appears to be an earlier version of the causation-as-manipulation approach. The Mu'tazilite school, applied to current marketing thinking, would certainly argue that changes in sales, for example, can be attributed to human agents' independent choices of advertising elements.

Because the Mu'tazilite position more or less challenged the doctrine of the all-encompassing power of Allah (SWT), other schools of theology pushed against this position by offering more consistent viewpoints. The Maturidi school of thought (later to be adopted by the Salafi schools as well) argued that when God creates an entity, he also creates its characteristics and effects so that once the cause is found, the effect will be automatically found without any external intervention. The Asharites, on the other hand, driven by the aim to highlight the power and omnipotence of God, completely rejected the necessity of cause-effect relationships arguing that there was no innate, secondary effect in things, i.e. causal powers assumed in the Aristotelian view of natural forces. Rather, effects are created by the direct intervention of God each time the cause comes into being. The advantage of this position was that adherents of its thought could easily explain miraculous events, the faith in which constitutes the fundamental article of Abrahamic faiths, while also affirming the omnipotence of God.

In summary, there are four different Muslim schools of thought concerning causality, namely, the Hikmah school, the Mu'tazilite school, the Maturidi/Salafi perspective and the Asharite school of thought. Unfortunately, the position of the latter three schools is not expounded or expanded in neither philosophical nor research terms. These three approaches appear to be reactive: the views of these schools were formulated in reaction to dominant theological issues rather than representing original philosophical or research arguments *per se*. The exception was the Asharite position that was later extended by Ghazali. There appears to be a gap in the literature on investigating and expanding the positions of Mu'tazilite and Maturidi scholars concerning causality.

3.3 Ghazali's view
Because the Asharite position lacked thorough philosophical justification, Ghazali (1058-1111) undertook a task of grounding it in the logic of philosophy. Ghazali embarked on the mission of challenging some assumptions adopted by the Hikmah School and the Mu'tazilite perspective. In this vein, he set out to question the necessity thesis. In other words, he questioned determinism, i.e. the assumption that the effect implies the existence of the necessary cause while focusing on Avicenna's ideas. Ghazali's arguments, specifically, God being the cause for everything and in permanent control of causal forces, provided a foundation for further development of the philosophy of *occasionalism*. On the side note, it appears that these discourses of causality entered the Western philosophy via David Hume who borrowed many of his ideas from Nicolas Malebranche (1628-1735), who in turn was influenced by Ghazali's occasionalist approach. Under the chapter titled *Issue 17*, Ghazali begins his rethinking of causality with the following statement:

> In our view, the connection between what are believed to be the cause and the effect is not necessary [. . .]. They are connected as the result of the Decree of God [ordinata], which preceded their existence. If one follows the other, it is because He has created them in that fashion, not because the connection in itself is necessary and indissoluble. He has the power [absoluta] to create the satisfaction of hunger without eating, or death without the severance of the head, or even the survival of life when the head has been cut off [. . .] We admit the possibility of a contact between the two [cotton and fire] which will not result in burning, as also we admit the possibility of the transformation of cotton into ashes without coming into contact with fire (Ghazali, 1963, p. 185).

Using the example of touching a cotton bud with fire, Ghazali argued that all we can see is that the coming of the two results in the cotton twisting and turning black before becoming ash. Ghazali does not deny causality (Goodman, 1978), he simply argues that there is no way for us to prove the necessary link between X and Y. He further says:

> The only argument is from the observation of the fact of burning at the time of contact with fire. But observation shows that one is with the other, not that it is by it and has no other cause than it [. . .] We say that it is God who – through the intermediacy of angels, or directly – is the agent of the creation of blackness in cotton, of the disintegration of its parts, and of their transformation into a smouldering heap or ashes (Ghazali, 1963, p. 186).

Ghazali makes a convincing case that all one can really say is that the cause (X) is regularly seen to accompany the effect (Y). This largely reflects the Human regularity assumption. Ghazali argues that it is impossible to prove that X is the necessary cause of Y. Rather, all we can prove is that X and Y are correlated in that X most often exists in conjunction with Y (the correlation assumption) or that X is regularly present before the emergence of Y (the temporal precedence assumption). Using the example of fire, he illustrates this point by saying that there is nothing intuitive about the fire to suggest that it causes the effect of burning. To apply this theory to marketing, Ghazali's approach would indicate that it would be impossible to prove that Islamic advertising drives sales, even though an empirical observation indicates regularity (regular increases in sales are consistently observed after the introduction of Islamic advertisements). Neither the introduction of Islamic advertisements would be sufficient to cause a sales increase nor a sales increase would imply the application of Islamic advertising. A similar logic was addressed via the INUS framework earlier. In essence, Ghazali militated against the notions of determinism and necessity in causation, while assuming that he is in opposition to the whole concept of causality because he wrongly assumed that the Hikmah school only propounded the necessity thesis. Ghazali's main motivation was to challenge logical determinism which could, in his view, lead to the loss of faith in the fundamental doctrines of Islam:

> We agree that fire is so created that when it finds two pieces of cotton which are similar, it will burn both of them, as it cannot discriminate between two similar things. At the same time, however, we can believe that when a certain prophet was thrown into the fire, he was not burnt – either because the attributes of fire had changed, or because the attributes of the prophet's person had changed. Thus, there might have originated – from God, or from the angels – a new attribute in the fire which confined its heat to itself, so that the heat was not communicated to the prophet. Hence, although the fire retained its heat, its form and its reality, still the effect of its heat did not pass onwards. Or there might have originated a new attribute in the prophet's body which enabled it to resist the influence of fire, although it had not ceased to be composed of flesh and bones [. . .] We see that one who covers himself with talc sits down in a blazing furnace and remains unaffected by it. He who has not observed such a thing will disbelieve it. Therefore, our opponents' disbelief in God's power to invest fire or a person's body with a certain attribute which will prevent it from burning, is like disbelief on the part of a man who has not observed talc and its effect. Things to which God's power extends include mysterious and wonderful facts. We have not observed all those mysteries and wonders. How, then, can it be proper on our part to deny their possibility, or positively to assert their impossibility? (Ghazali, 1963, pp. 190-191).

Similarly, touching on epistemological issues, Ghazali argued that grasping the necessary causality through human senses (i.e. empirically) may not be feasible because he maintained that human senses related to their observing capacity are imperfect. In this, he simply reiterated Avicenna's critique of induction (*istiqra*), whereby Avicenna thought that induction can potentially create misleading assumptions of causal linkages, and thus false generalisations. Hence, Ghazali reasoned that theory building would always be a subjective

exercise rather than becoming the "discovery" of truths. He suggested that causality could not be absolutely proven and that God directly intervenes every moment to continuously form events and their relationships. These views later formed the foundation of *occasionalism.* The philosophy of occasionalism is currently used by many Muslim scholars to explain causality and its role in science.

4. Causal assumptions in Islamic marketing

To analyse causal statements in the discipline of Islamic marketing, we collate all causal statements advanced in the form of formal hypotheses in the articles published in the *Journal of Islamic Marketing* during 2014-2019. We find both that the number of articles that state formal hypotheses and the average number of hypotheses per article gradually increased within this period (Table I). The number of hypotheses stated in the articles ranges from 1 to 15. In summary, evidence indicates continually increasing reliance on causal statements in research on Islamic marketing.

The causal statements in the *Journal of Islamic Marketing* can be generally divided into two groups based on the unit of analysis: organisations/brands and individuals. Table II shows the structure of causal statements concerning organisations and brands. In these statements, the hypothesised effects (Y) include organisational performance, organisational behaviour, customer satisfaction and brand equity/performance. The causes are assumed to

Table I.
Trends on hypothesis development in the articles published in the *Journal of Islamic Marketing* in 2014-2018

Year	Minimum no. of hypotheses per article	Maximum no. of hypotheses per article	Average no. of hypotheses per article	No. of articles
2014	2	14	6.69	13
2015	3	10	4.88	9
2016	1	14	5.58	17
2017	2	15	6.12	24
2018	2	13	6.38	26

Table II.
The general structure of causal arguments in Islamic marketing related to organisations and brands

		Typology of causes (X)		
Effects (Y)		Organisational or brand practices (CSR etc.)	Organisational culture, norms and beliefs	Environmental factors
Organisational performance		Koku and Savas (2014), Hanzaee and Sadeghian (2014), Othman *et al.* (2017), Ali (2017), Rahman and Zailani (2017), Zebal (2018), Fard and Amiri (2018), Adi and Adawiyah (2018), Alsartawi (2019), Hanzaee *et al.* (2019)	Ali *et al.* (2015), Rafiki and Wahab (2016), Othman *et al.* (2017)	Ali *et al.* (2015) Alsartawi (2019)
Organisational behaviour		Fesharaki and Sehhat (2018)	Sahijan *et al.* (2014)	Ngah *et al.* (2015)
Customer satisfaction		Hanzaee and Sadeghian (2014) Abd Aziz (2018) Khamis and AbRashid (2018) Lone and Bhat (2019)	Abd Aziz (2018)	
Brand equity and performance		Wahyuni and Fitriani (2017)	Al-Nashmi and Almamary (2017)	

be organisational (brand) practices, organisational culture, norms and beliefs and environmental factors.

As can be seen in Table II, the majority of research focused on how organisational practices (X) influence organisational performance (Y). Moreover, the impact of organisational culture and values on organisational performance is also well researched. However, theoretical propositions on how environmental factors may determine customer satisfaction for firms/organisations or brand equity/performance is lacking.

Table III shows the structure of causal statements related to individuals including consumers. In these statements, the hypothesised effects (Y) include consumer behaviour and consumer choice of Islamic offerings, consumer attitude and beliefs, marketing professionals' beliefs and the behaviour of members of society. The causes (X) include marketing mix elements (e.g. advertisement features, price, service quality), individual ethics, norms and beliefs (e.g. religiosity, religious values), individual characteristics (e.g. demographics, psychographics) and environmental factors. We find that the majority of causal inferences are concerned with how individual ethics, norms and values (X) impact their consumption choices and consumption-related beliefs and attitudes (Y). There appears to be a dearth of theory building in the area of factors influencing the behaviour and actions of marketing professionals and that of members of society.

In addition, we detect a couple of instances where researchers state null hypotheses, which cannot be considered as causal statements (Bachleda *et al.*, 2014; Thaker, 2018). Because such statements are part of the mechanism of statistical inference and hypothesis testing, there is no need to state them as part of theoretical development. We would like to emphasise here that relevant theory building should become the main focus of any research project, and that these theories must lead to alternative hypotheses only.

The most important aspect of stating hypotheses is the discussion of relevant theories and theoretical explanation that backs up these hypotheses. What matters in Islamic marketing research is a set of assumptions that accompany the justification of hypotheses. For example, Islamic marketing research focusing on macromarketing issues should focus on relevant assumptions (Kadirov, 2014; Kadirov *et al.*, 2016). Researchers must make sure that their explanations are congruent with the Islamic perspectives on causality.

5. Discussion and conclusion
5.1 Is the notion of causality incommensurable with the orthodox doctrines of Islam?
The question of whether the conventional understanding of causality is incommensurable with Islamic thinking has two dimensions, namely, ontological and epistemological. The ontological dimension focuses on the definition and nature of causality. As the preceding review of theories concerning causality shows that key debates centred around the necessity thesis (Avicenna versus Ghazali), the causation-as-force argument (the Hikmah School versus Ash'arites/Ghazali) and human agency (Mu'tazilites versus Ash'arites). Ironically, even though Ghazali advanced strongly convincing arguments, the vast majority of the current Islamic schools of thought (e.g. Maturidi, Salafi) do not agree with the position of Ash'arites, and by implication, may strongly question those of Ghazali. Because the Maturidi school has a large following in Eastern Europe, Anatolia, Central Asia and the Indian sub-continent, the discussion of these concepts is far from being straightforward. However, based on the preceding review, we can say that most scholars agree that our knowledge of the reality is based on conceptually isolating "events/objects" and observing correlation (regularity) between these events (Pearl and Mackenzie, 2018). The necessity thesis is rejected by both classic Muslim scholars and modern thinkers (due to the general shift towards probabilistic causation). There appears to be no logical necessity that two

Table III.
The general structure of causal statements in Islamic marketing related to individuals

Effects (Y)	Typology of causes (X)			
	Marketing mix elements	Individual ethics, norms and beliefs (e.g. religiosity)	Individual characteristics	Context and environmental factors
Consumer behaviour and choice	Behboudi et al. (2014), Osman et al. (2014), Husin et al. (2016), Mansour et al. (2016), Harris and Khatami (2017), Khan et al. (2017b), Rahman et al. (2017a), Akbari et al. (2018), Butt et al. (2018b, 2018a), Ezeh and Nkamnebe (2018)	Bachleda et al. (2014), Amin et al. (2014), Nayebzadeh and Jalaly (2014), Goh et al. (2014), Haque et al. (2015), Abd Rahman et al. (2015), Sumaedi et al. (2015), Husin et al. (2016), Suki and Salleh (2016), Yeniaras (2016), Ishak et al. (2016), Sharif (2016), Jamshidi and Hussin (2016), Azam (2016), Islam and Chandrasekaran (2016), Harris and Khatami (2017), Dekhil et al. (2017a), Usman et al. (2017), Ali et al. (2017), Rahman et al. (2017b), Mahdzan et al. (2017), Khan and Kirmani (2018), Rahman et al. (2018), Siyavooshi et al. (2019), Zinser (2019)	Amin et al. (2014), Dali et al. (2015), Kassim and Zain (2016), Dekhil et al. (2017a), Haider et al. (2018), Raza et al. (2019)	Grine and Saeed (2017), Rahman et al. (2017a), Amron and Mursid (2018), Ezeh and Nkamnebe (2018), Saeed and Azmi (2019)
Consumer attitude and beliefs	Farah and El Samad (2015), Mansour et al. (2016), Hanzaee and Esmaeilpour (2017), Altaf et al. (2017), Janahi and Al Mubarak (2017), Bahrainizad and Rajabi (2018), Suki and Salleh (2018), Hoque et al. (2018)	Koku and Jusoh (2014), Hassan (2014), Bassam (2014), Farrag and Hassan (2015), Azam (2015), Ariffin et al. (2016), Hassan and Harun (2016), Hanzaee and Esmaeilpour (2017), Dekhil et al. (2017a), Altaf et al. (2017), Ilter et al. (2017), Khan et al. (2017a), Elseidi (2017), Isa et al. (2018), Garg and Joshi (2018), Sherwani et al. (2018), Fauzi and Suryani (2019)	Koku and Jusoh (2014), Hassan (2014), Muhamad et al. (2016), Kassim and Zain (2016), Yeniaras and Akarsu (2017), El Ebrashi et al. (2018)	Sayogo (2018), El Ebrashi et al. (2018), Bahadori et al. (2019), Ihtiyar (2019)
Marketing professionals' behaviour	Wahab (2018)	Karami et al. (2014), Wahab (2018)		
Societal members' behaviour (e.g. boycotting, donating)	Thaker (2018)	Charsetad (2016), Abdul-talib et al. (2016), Dekhil et al. (2017b), Abdul-Talib and Adnan (2017), Rizal and Amin (2017)	Al-Zu'bi (2016)	Omar et al. (2017)

events are linked (Khan, 2013). For example, an increase in sales in an Islamic market does not have to have the natural cause that can be somehow linked to proper Islamic conduct in marketing (e.g. Islamic advertising) which is the necessity assumption. Furthermore, vice versa, the correct Islamic conduct may not absolutely guarantee commercial success, which represents the sufficiency assumption. Such expectations are better to be worded from a normative judgement perspective (Khan, 2013), which emphasises probabilistic conjoining between the two factors while maintaining the possibility of them being unbounded. Regarding the "causation-as-force" argument, the coherent position would be to attribute all power to Allah (SWT) alone, rather than to events observed in isolation. From the occasionalism perspective, events might not contain "power" in themselves as such, rather both the capacity to recognise them and regularity through which these events are conjoined is Allah's (SWT) ongoing creation. Causation is to be seen as an *occasion or manifestation* of Allah's power partially observed in localised regularities. Similarly, human agency, the capacity to choose and act, can be seen as an occasion of being empowered by the Creator.

The epistemological dimension focuses on whether one could certainly learn if any kind of causality was operational in a specific situation. Ghazali was very sceptical about the human capacity to fully comprehend causality because his position was that observed regularity (correlation) was not an indication of the necessary causal association. However, this view does not represent the final Islamic judgement on the issue. Researchers would be capable to investigate the patterns and magnitude of conjoining/bounding. The counterfactual approach, the view of possible "worlds", is a solution that does not contradict the Islamic position. The probability of conjoining can be measured using statistical tools and manipulating different elements of events (e.g. the feature of an Islamic advertisement) to gauge how this manipulation would affect sales. In this context, the comparative "world" would comprise a set of units (e.g. firms) which implemented other than Islamic advertising strategies (in cross-sectional studies) or the same firms which switched from non-Islamic to Islamic advertising, or vice-versa (time-series contexts) over the observation period. The control condition in experimental studies is another way of constructing alternative worlds.

5.2 Occasionalism and Sunnah of Allah

Some commentators may dismiss the difference between causality and conjoining (bounding, occasion, manifestation) as simply semantics. The difference would be critical depending on the adopted research definition of causality. We think that the notions such as conjoining, bounding and causality can be used interchangeably in the Islamic marketing research context, as long as the researcher maintains that Allah's (SWT) power and creative acts circumscribe both the human capacity to define, isolate, measure and observe phenomena and how these phenomena behave or co-behave. Allah (SWT) informs that everything in the Universe is built according to a measure (Qur'an 54:49). Qur'an constantly challenges human beings to explore and reflect on the intelligent design of the universe, which is extremely complex, interconnected and dynamic. The observer can only study a reduced version of such complexity, isolated relationships, to infer possible workings of the divine creation. The occasionalism account maintains that Allah (SWT) creates antecedents, consequences, conjoining between antecedents and consequences and human capacity to perceive and understand such conjoining (Khan, 2013). Probabilistic causation affirms this positio, because this view maintains that causality is uncertain and that there exist unexpected exceptions.

Qur'an (48:23) refers to the *Sunnah of Allah*, the way Allah (SWT) chooses to act in consistent ways. Allah (SWT) indicate the existence of repeated patterns in social contexts. Interestingly, when referring to the *Sunnah of Allah* Qur'an links past events to future

outcomes. For example, the rise and fall of different nations are explained in a similar manner. Therefore, the concept of *Sunnah of Allah* can be possibly extended into other complex areas such as individual, group, organisational and societal dynamics.

5.3 Marketing theory building from the Islamic perspective

Researchers focusing on Islamic marketing are better to see themselves as intellectuals who are in quest of uncovering complex, not readily apparent, but rationally plausible mechanisms and processes of market phenomena occurring in congruence with the established *Sunnah of Allah*. To be able to accomplish this, researchers should consider the following recommendations. First, the researcher should keep in mind that there might be no necessary or sufficient causal relationship between X and Y. The best view would be to see the relationship in probabilistic terms. The words such as *less (more) likely, likelihood, probable, possibly* and *in some contexts* should be used to clearly indicate this sense in theory building. Second, the researcher should consider if the verbs such as *causes*, *impacts*, *associated with* and *leads* can be replaced with "regularly conjoined with". The concept of conjoining does indicate causality. However, it denotes the broader Islamic perspective that is consistent with occasionalism. Third, note that conjoining should be seen in the context of multiple factors determining the outcome. Hence, the assumed cause (X) would be only one of many possible factors. Therefore, the conjoining effect must be theorised in the context of maintaining all other potential variables constant. Because such simulation is very hard to attain in real contexts, theory building would have to deal with hypothetical situations. Finally, the concept of *Sunnah of Allah* should become an integral part of theory building in the discipline of Islamic marketing. Based on the aforementioned suggestions, a theoretical transformation of the following form can be considered:

- *Conventional form*: An advertisement portraying Islamic values will lead to an increase in sales.
- *Islam-congruent form*: In accord with *Sunnah of Allah*, an advertisement portraying Islamic values is likely to be significantly conjoined with an increase in sales in Islamic markets, whereas other relevant variables remain constant.

Causal reasoning is what makes us unique as human beings (Pearl and Mackenzie, 2018). Our ability to generate, manipulate and work with mental models of causality is a powerful gift bestowed on us by Allah (SWT). Islamic marketing researchers, to truly maintain the spirit of Islamic marketing research, should be very careful not to commit fallacies such as causality-as-power, the necessary causality, and over-simplification of complexity. Henceforth, Islamic marketing research projects are better to be taken as investigations into the market/behavioural phenomena that are extremely complex, dynamic, entangled, emergent, unstable and contingent, while at the same time recognising that the source of stability in such environments is *Sunnah of Allah*.

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