# Differentiating Multidisciplinary, Interdisciplinary, and Transdisciplinary Approaches in Islamic Studies: Conceptual- Epistemological Foundations and Methodological Implications

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***Abstract***

*The growing complexity of contemporary religious and social issues has encouraged the development of multidisciplinary, interdisciplinary, and transdisciplinary approaches in Islamic Studies. However, these approaches are often used interchangeably without sufficient attention to their conceptual, epistemological, and methodological differences. This paper examines the fundamental characteristics of the three approaches, identifies their distinguishing features, and discusses their implications for doctoral-level research in Islamic Studies. Using a conceptual literature-based approach, the paper synthesizes theoretical perspectives on interdisciplinarity and transdisciplinarity and relates them to the integrative-interconnective paradigm developed by M. Amin Abdullah. The analysis focuses on the relationships among disciplines, the integration of knowledge, and the involvement of academic and non-academic actors in knowledge production. The central argument is that the primary distinction among the three approaches lies not in the number of disciplines involved, but in the ways disciplinary perspectives interact, knowledge is integrated, and research problems are addressed. Multidisciplinary research brings together perspectives while largely maintaining disciplinary autonomy; interdisciplinary research develops conceptual and methodological integration; and transdisciplinary research seeks to move beyond disciplinary boundaries, particularly when addressing complex problems through collaboration between academic and societal knowledge. These distinctions have important methodological implications for doctoral research design, especially in defining research problems, selecting theoretical frameworks, integrating analytical perspectives, and determining the role of relevant social actors. The paper contributes a conceptual basis for selecting and justifying cross-disciplinary approaches in contemporary Islamic Studies.*

***Keywords:*** *Islamic Studies; multidisciplinary; interdisciplinarity; transdisciplinarity; integrative-interconnective paradigm; research methodology.*

## Introduction

Contemporary Islamic Studies increasingly encounters complex issues that cannot be adequately understood through a single disciplinary perspective. The

study of Islam extends beyond religious texts and normative teachings to encompass social relations, culture, politics, economics, education, environmental concerns, technology, and changing patterns of human life. This complexity calls for methodological approaches capable of examining Islamic phenomena through multiple perspectives while establishing productive relationships between Islamic sciences and other fields of knowledge. In Indonesian Islamic higher education, this need has contributed to discussions of multidisciplinary, interdisciplinary, and transdisciplinary approaches as pathways for developing more comprehensive and contextually responsive scholarship (Turmudi et al., 2021).

The integrative-interconnective paradigm developed by M. Amin Abdullah provides an important framework for addressing this challenge. Abdullah (2014) emphasizes the need for dialogue and interconnectedness among religious knowledge, natural sciences, social sciences, and cultural studies. From this perspective, the engagement of Islamic Studies with other disciplines should not be reduced to the addition of external theories or methods. Rather, it requires meaningful intellectual relationships that enable different traditions of knowledge to illuminate the same problem while maintaining critical awareness of their respective assumptions and limitations. Recent discussions of interdisciplinary Islamic Studies likewise highlight the importance of examining how disciplinary perspectives are applied and connected in research practice (Aziz & Azizah, 2023; Irham, 2026).

Despite the growing attention to cross-disciplinary approaches, the terms multidisciplinary, interdisciplinary, and transdisciplinary are not always distinguished with sufficient conceptual precision. Their use may imply that any research involving several disciplines is necessarily interdisciplinary or transdisciplinary. However, the number of disciplines involved does not, by itself, determine the nature of a research approach. The more fundamental issue concerns how disciplinary perspectives are positioned, how their concepts and methods interact, and whether knowledge production remains within disciplinary boundaries or moves toward more integrated forms of inquiry (Frodeman et al., 2017; Klein, 2017, 2023).

Conceptually, multidisciplinary research brings together perspectives from different disciplines while generally preserving their respective analytical frameworks. Interdisciplinary research goes further by establishing substantive relationships and integrating concepts, theories, data, or methods to develop a more coherent understanding of a research problem. Transdisciplinary research, meanwhile, seeks to move beyond conventional disciplinary boundaries and, particularly in the study of complex societal problems, may involve collaboration between academic researchers and non-academic actors in the production of knowledge (Choi & Pak, 2006; Lang et al., 2012; Nicolescu, 2002). These

approaches should not be treated as a universal hierarchy in which one is inherently superior to the others. Their suitability depends on the nature of the problem, the objectives of the research, and the relationships required to generate defensible knowledge.

This distinction is particularly significant for Islamic Studies because its objects of inquiry may involve normative, historical, social, cultural, and empirical dimensions simultaneously. For example, research on environmental management in pesantren can examine Islamic ethical concepts and religious texts, social practices and institutional structures, and ecological conditions. A multidisciplinary design may analyze these dimensions separately; an interdisciplinary design may integrate Islamic ethical concepts with ecological and social theories; and a transdisciplinary design may involve pesantren leaders, students, local communities, and environmental practitioners in jointly defining problems and developing practical responses. These possibilities illustrate how the choice of approach affects not only theoretical framing but also research questions, data collection, analytical procedures, and the role of participants in knowledge production. Research on transdisciplinary sustainability further emphasizes the importance of knowledge co-production and collaboration in connecting academic inquiry with practical needs (Jacobi et al., 2022; Reed et al., 2023).

Although scholarship on interdisciplinarity and transdisciplinarity provides established conceptual distinctions, their methodological implications for doctoral-level Islamic Studies require careful examination. Researchers need to explain not only which disciplines are involved, but also why those disciplines are necessary, what each contributes, how their perspectives are related, and what form of integration the research seeks to achieve. Where transdisciplinary claims are made, researchers must additionally clarify whether non-academic actors participate merely as sources of information or as partners in framing problems, producing knowledge, and evaluating possible solutions. Without such clarification, the terminology risks becoming a label that is not adequately reflected in the research design.

Against this background, this paper examines the conceptual, epistemological, and methodological differences among multidisciplinary, interdisciplinary, and transdisciplinary approaches in Islamic Studies. It addresses three questions: (1) What are the concepts and principal characteristics of these three approaches in Islamic Studies? (2) How do they differ conceptually, epistemologically, and methodologically? and (3) What implications do these differences have for the design and development of doctoral-level research in Islamic Studies? The paper argues that the principal distinction among the three approaches lies in the relationships established among disciplines, the degree and form of knowledge integration, and the organization of knowledge production—not

simply in the number of disciplines involved. By relating these distinctions to Abdullah's integrative-interconnective paradigm, the paper seeks to provide a conceptual basis for selecting and justifying cross-disciplinary approaches in contemporary Islamic Studies.

## Research Method

This paper employs a conceptual literature-based approach to examine the distinctions among multidisciplinary, interdisciplinary, and transdisciplinary approaches in Islamic Studies. Rather than collecting primary empirical data, the study focuses on the critical examination and synthesis of relevant scholarly literature to clarify the conceptual foundations, epistemological orientations, and methodological implications of the three approaches. This approach is appropriate for addressing the central concern of the paper: how different forms of relationships among disciplines shape the production of knowledge and the design of research in Islamic Studies.

The literature examined includes foundational works on interdisciplinarity and transdisciplinarity, studies addressing the development of cross-disciplinary research, and publications discussing integrative approaches within Islamic higher education. Particular attention is given to the typology of interdisciplinarity developed by Klein (2017), the methodological perspectives of Nicolescu (2002, 2010), and the principles of transdisciplinary research articulated by Lang et al. (2012). The analysis also draws on Abdullah's (2006, 2014) integrative-interconnective paradigm to situate the discussion within the intellectual context of contemporary Islamic Studies, especially the relationship between Islamic sciences and other fields of knowledge.

The analysis proceeds through three interrelated stages. First, the key concepts and defining characteristics of multidisciplinary, interdisciplinary, and transdisciplinary approaches are identified from the selected literature. Second, these approaches are compared according to their disciplinary relationships, epistemological orientations, forms of knowledge integration, methodological implications, and the roles assigned to academic and non-academic actors. Third, the resulting conceptual distinctions are related to the methodological requirements of doctoral-level research in Islamic Studies. A hypothetical case of environmental management in pesantren is used to illustrate how the choice of approach may influence research questions, analytical frameworks, data collection, and collaboration with relevant actors.

The comparison is interpretive and analytical rather than statistical. The study does not seek to establish a universal ranking among the three approaches. Instead, it develops a contextual framework for understanding their differences and identifying the circumstances in which each may be appropriate. The conclusions

are therefore intended as a conceptual contribution to methodological reflection in Islamic Studies, rather than as empirical generalizations derived from fieldwork.

## Results

### 1. Conceptual Foundations of Multidisciplinary, Interdisciplinary, and Transdisciplinary Approaches

The concepts of multidisciplinarity, interdisciplinarity, and transdisciplinarity describe different ways of organizing knowledge across disciplinary boundaries. Although all three approaches involve more than one disciplinary perspective, they differ in the relationships established among disciplines and in the extent to which knowledge is integrated. Consequently, the number of disciplines involved is insufficient to determine whether a study is multidisciplinary, interdisciplinary, or transdisciplinary. The more decisive criteria are the organization of disciplinary contributions, the integration of concepts and methods, and the purpose of the research process (Choi & Pak, 2006; Klein, 2017).

Multidisciplinarity refers to an approach in which two or more disciplines examine the same problem while largely maintaining their respective concepts, methods, and analytical frameworks. The contribution of each discipline expands the range of perspectives available to the researcher, but the perspectives may remain separate rather than being integrated into a unified analytical framework. Its principal strength is therefore the breadth of analysis, while its limitation is the possibility that the research will produce a collection of parallel explanations without establishing substantive relationships among them (Frodeman et al., 2017).

Interdisciplinarity places greater emphasis on interaction and integration among disciplines. It involves more than the simultaneous use of theories or methods from different fields. Rather, concepts, data, methods, or theoretical assumptions are brought into a productive relationship to develop a more coherent understanding of the research problem. This process may require researchers to identify common conceptual ground, negotiate differences in disciplinary language, and explain how the integration contributes to the analytical framework (Repko & Szostak, 2021).

Transdisciplinarity seeks to address problems that cannot be adequately understood within established disciplinary boundaries alone. In some traditions, it emphasizes the development of a more comprehensive understanding of reality; in problem-oriented research, it may also involve collaboration between academic researchers and societal actors in defining problems and producing actionable knowledge. These orientations should not be treated as identical in every respect, but both emphasize the limitations of knowledge organized exclusively within conventional disciplinary structures (Nicolescu, 2002, 2010; Lang et al., 2012).

Accordingly, the three approaches can be distinguished by their dominant patterns of knowledge organization: multidisciplinarity emphasizes the coexistence of disciplinary perspectives, interdisciplinarity emphasizes their integration, and transdisciplinarity emphasizes the crossing of disciplinary boundaries and, where appropriate, collaboration with non-academic forms of knowledge. These distinctions are analytical rather than hierarchical. The suitability of each approach depends on the research question, the complexity of the problem, and the type of knowledge required to address it.

## 2. Epistemological Differentiation among the Three Approaches

The epistemological differences among the three approaches concern how knowledge is positioned, related, and validated. In multidisciplinary research, the autonomy of each discipline generally remains intact. Each discipline contributes knowledge according to its established assumptions, concepts, and standards of validity. The relationship among these contributions may be complementary, but the research does not necessarily require their integration into a single explanatory framework.

Interdisciplinary research involves a more substantive relationship among different knowledge traditions. The researcher must establish how concepts, theories, or methods from different disciplines can be brought together without ignoring their differences. Integration therefore requires more than the accumulation of perspectives; it requires a reasoned explanation of the relationships among them and of the analytical contribution produced through their interaction (Klein, 2017; Repko & Szostak, 2021).

Transdisciplinary research expands the epistemological discussion by considering the relationship between academic knowledge and other relevant forms of knowledge. In research addressing complex societal problems, practical experience and the knowledge of affected communities may contribute to problem formulation, interpretation, and the development of possible solutions. Nevertheless, the inclusion of non-academic knowledge does not eliminate the need for methodological rigor or critical examination. The researcher must explain how different knowledge claims are assessed and how their contributions are incorporated into the research process (Lang et al., 2012; Pohl & Hirsch Hadorn, 2007).

In Islamic Studies, these distinctions require particular attention to the epistemological status of religious texts and traditions. The Qur'an, hadith, and other normative sources may function as objects of historical inquiry, sources of normative reasoning, or elements of a broader analytical framework. Their roles should be explicitly defined rather than assumed to be identical to empirical evidence or social-scientific concepts. Abdullah's (2006, 2014) integrative-

interconnective paradigm provides a relevant framework for examining relationships between Islamic sciences and other fields while maintaining awareness of the differences among their knowledge traditions.

Thus, the epistemological distinction is not simply a matter of combining more sources. It concerns the principles governing the relationship among those sources, the assumptions through which they are interpreted, and the standards used to justify the resulting claims.

Table 1. Epistemological Comparison of the Three Approaches

| **Dimension** | **Multidisciplinary** | **Interdisciplinary** | **Transdisciplinary** |
|---|---|---|---|
| Knowledge sources | Contributions from separate disciplines | Knowledge from disciplines brought into dialogue | Disciplinary knowledge and, where relevant, practical or societal knowledge |
| Relationship among knowledge traditions | Parallel or complementary | Interactive and integrative | Crosses disciplinary boundaries and may involve collaborative knowledge production |
| Analytical orientation | Multiple disciplinary explanations | Integrated conceptual or analytical framework | Broader understanding of complex problems |
| Validation | Standards relevant to each discipline | Disciplinary standards and coherence of integration | Academic rigor alongside attention to the credibility and relevance of collaborative knowledge |
| Main epistemological challenge | Fragmentation of perspectives | Superficial or insufficient integration | Unclear validation criteria or reduction of one knowledge tradition to another |

Source: Conceptual synthesis based on Klein (2017), Nicolescu (2002, 2010), Lang et al. (2012), and Abdullah (2006, 2014).

## 3. Methodological Differentiation

The methodological differences among the three approaches become visible in the formulation of research questions, the organization of data collection, the analytical process, and the role assigned to researchers and participants. A study should therefore be classified according to the procedures it actually employs rather than solely according to the terminology used in its methodology section.

In multidisciplinary research, different disciplines may analyze a shared problem using their own methods. The resulting analyses can be compared or assembled to map the problem's complexity. Interdisciplinary research requires a stronger methodological connection: the research design must demonstrate how the concepts, data, or methods of different disciplines contribute to a common

analytical framework. This integration should be visible throughout the research process rather than appearing only in the theoretical background.

Transdisciplinary research may require additional forms of collaboration, particularly when a problem is shaped by institutional practices, local conditions, and the experiences of affected communities. In such cases, participants outside academia may contribute to defining the problem, developing knowledge, or evaluating possible responses. Transdisciplinary research is not defined merely by interviewing community members, however; the methodological significance lies in the nature and extent of their participation in the knowledge-production process (Lang et al., 2012; Jacobi et al., 2022).

These differences have direct implications for doctoral-level Islamic Studies. Researchers need to demonstrate consistency between the research problem, the selected approach, the analytical procedures, and the claims made in the conclusion. A study that uses several theories without integrating them should not automatically be described as interdisciplinary. Similarly, a study that collects information from community members does not necessarily qualify as transdisciplinary if those members have no role beyond providing data.

Table 2. Methodological Comparison of the Three Approaches

| **Research component** | **Multidisciplinary** | **Interdisciplinary** | **Transdisciplinary** |
|---|---|---|---|
| Research focus | A problem examined from several disciplinary perspectives | A problem requiring integration across disciplines | A complex problem requiring knowledge beyond established disciplinary boundaries |
| Research questions | May be addressed through separate disciplinary questions | Framed to enable conceptual or methodological integration | May be formulated collaboratively with relevant societal actors |
| Data collection | Methods selected by each discipline | Methods coordinated around an integrated analytical framework | May combine academic methods with participatory or collaborative procedures |
| Analysis | Separate analyses followed by comparison or mapping | Integrated analysis of concepts, evidence, or methods | Cross-disciplinary analysis that may include collaborative interpretation |
| Role of the researcher | Specialist or coordinator of disciplinary contributions | Integrator of disciplinary perspectives | Researcher, facilitator, or collaborator in knowledge production |

| | | | |
|---|---|---|---|
| Potential output | A broader map of the problem | An integrated explanation or analytical framework | Shared knowledge and, where appropriate, practical responses |

Source: Conceptual synthesis based on Choi and Pak (2006), Klein (2017), Repko and Szostak (2021), and Lang et al. (2012).

## 4. Comparative Illustration in Islamic Studies: Environmental Management in Pesantren

Environmental management in pesantren provides a conceptual illustration of how the choice of approach changes the organization of a research project. The example is used to clarify methodological differences, not to report empirical findings from fieldwork.

A multidisciplinary study could examine environmental management through several parallel perspectives. Islamic studies might analyze relevant religious texts and ethical teachings; ecology might assess environmental conditions; sociology might examine institutional practices; and education might investigate environmental learning. Each discipline would contribute an analysis according to its own concepts and methods.

An interdisciplinary study would establish substantive relationships among these perspectives. For example, concepts such as khalifah, mizan, and fasad could be examined alongside ecological concepts and theories of social behavior to develop an integrated framework for understanding environmental practices in pesantren. The research would need to explain how these concepts relate and how the resulting framework informs data collection and interpretation.

A transdisciplinary study could involve pesantren leaders, students, surrounding communities, environmental practitioners, and relevant public institutions in jointly defining environmental problems and exploring possible responses. Depending on the research objectives, collaborative workshops, participatory mapping, and shared evaluation could complement conventional academic methods. The defining feature would be the participants' meaningful involvement in knowledge production rather than their mere presence as research subjects.

The comparison demonstrates that the same general topic can be approached in different ways. The methodological classification depends on how disciplinary knowledge is organized and how relevant actors participate, not simply on the topic or the number of perspectives included.

5.5. Implications for Doctoral Research in Islamic Studies

For doctoral-level research, the selection of a cross-disciplinary approach requires explicit methodological justification. Researchers should clarify the nature of the research problem, explain why a single discipline is insufficient where

applicable, identify the contribution of each discipline, and specify how the different perspectives are related. If the research claims an interdisciplinary orientation, the integration must be demonstrated in the analytical framework. If it claims a transdisciplinary orientation, the role of non-academic actors and the procedures through which their knowledge contributes to the research should also be explained.

The choice of approach should be reflected in the entire research design, including the formulation of questions, selection of theoretical perspectives, construction of data, analytical procedures, and evaluation of findings. Maintaining disciplinary depth remains important: openness to other disciplines does not justify overlooking their assumptions, methods, or standards of evidence. Instead, meaningful integration requires an adequate understanding of the contributions and limitations of the knowledge traditions being brought into dialogue (National Academy of Sciences et al., 2005; Repko & Szostak, 2021).

Within Islamic Studies, Abdullah's (2006, 2014) integrative-interconnective paradigm offers a basis for developing dialogue between Islamic sciences and other fields. Its methodological relevance lies in encouraging researchers to establish productive relationships among knowledge traditions while clarifying the role and status of each perspective. Such integration should be demonstrated through research practice rather than asserted as a general principle.

The three approaches may complement one another in a broader research program, but they do not constitute mandatory successive stages. The appropriate approach depends on the research objective and the kind of relationship among knowledge sources that the problem requires. The central methodological task is therefore to establish a defensible alignment between the research question, the selected approach, and the intended contribution to knowledge.

## Discussion

### 1. Reconsidering Disciplinary Boundaries in Islamic Studies

The findings of this conceptual analysis indicate that the distinction among multidisciplinary, interdisciplinary, and transdisciplinary approaches should be understood primarily through the relationships established among different forms of knowledge. Although the three approaches share an interest in addressing problems that extend beyond a single disciplinary perspective, they differ in how disciplinary boundaries are maintained, negotiated, or crossed. This distinction is particularly important in Islamic Studies, where the diversity of research objects often encourages the simultaneous use of normative, historical, sociological, anthropological, and other analytical perspectives.

Klein's (2017) typology provides a useful basis for interpreting these differences. Multidisciplinarity is generally characterized by the juxtaposition or alignment of disciplinary perspectives, whereas interdisciplinarity emphasizes integration and collaboration. Transdisciplinarity extends the discussion toward forms of synthesis and problem-oriented inquiry that may transcend conventional disciplinary boundaries. However, these categories should not be interpreted as a rigid evolutionary sequence. A multidisciplinary approach is not necessarily an incomplete interdisciplinary approach, nor is transdisciplinarity inherently superior to other forms of inquiry. Each has a distinct methodological purpose.

This interpretation challenges the assumption that the involvement of more disciplines automatically indicates greater methodological sophistication. A study drawing on five disciplines may remain multidisciplinary if each perspective is applied separately. Conversely, a study involving only two disciplines may demonstrate substantial interdisciplinarity when their concepts and methods are integrated into a coherent analytical framework. The critical issue is therefore the quality and justification of disciplinary relationships rather than the quantity of disciplines represented.

In Islamic Studies, this distinction helps clarify the methodological status of research that combines Islamic sciences with social sciences or other fields. The inclusion of sociological or anthropological theories alongside Qur'anic interpretation, for example, does not automatically constitute interdisciplinary research. Such a designation requires the researcher to demonstrate how the different perspectives interact and what analytical contribution emerges from their integration. Without this explanation, the use of multiple theories may remain additive rather than integrative.

## 2. Epistemological Integration and the Integrative-Interconnective Paradigm

The epistemological implications of cross-disciplinary research are particularly significant in Islamic Studies because its knowledge traditions are grounded in different sources, assumptions, and procedures of justification. Normative religious reasoning, historical interpretation, and empirical social-scientific inquiry do not necessarily operate according to identical epistemological principles. Consequently, the integration of these traditions requires careful consideration of their respective roles and limitations.

Abdullah's (2006, 2014) integrative-interconnective paradigm offers an important framework for addressing this issue. Rather than maintaining rigid separation among Islamic sciences, social sciences, humanities, and natural sciences, the paradigm encourages dialogue and productive relationships among them. Its significance lies not in eliminating disciplinary differences, but in creating

intellectual connections through which different forms of knowledge can contribute to a broader understanding of religious and social phenomena.

Nevertheless, the integrative-interconnective paradigm should not be interpreted as an automatic methodological formula. The aspiration to connect disciplines does not, by itself, establish how integration should be performed in a particular research project. Researchers must still identify the concepts to be integrated, explain the relationship among their underlying assumptions, and determine the criteria through which the resulting interpretations can be evaluated.

For instance, the Islamic concepts of khalifah, mizan, and fasad may provide normative and ethical perspectives for examining environmental responsibility. Ecological research, meanwhile, may offer empirical explanations of environmental conditions and processes. An interdisciplinary study can establish relationships between these perspectives, but it must avoid treating normative religious concepts as though they were empirical measurements or reducing religious meanings entirely to social-scientific categories. The integration must preserve the distinctive analytical contributions of each knowledge tradition.

This consideration reveals an important epistemological challenge: meaningful integration requires both openness and differentiation. Researchers must remain open to insights from other disciplines while recognizing that different knowledge claims may require different forms of justification. Such an approach allows the integrative-interconnective paradigm to function as a critical orientation for research design rather than merely as an institutional or philosophical slogan.

## 3. Transdisciplinarity and the Problem of Knowledge Co-Production

The discussion of transdisciplinarity introduces a further question concerning who participates in the production of knowledge. While multidisciplinary and interdisciplinary research are often organized primarily through academic disciplines, problem-oriented transdisciplinary research may extend the process to actors whose practical experiences and institutional knowledge are directly relevant to the problem being investigated.

Lang et al. (2012) describe transdisciplinary research as involving processes of collaborative problem framing, knowledge co-creation, and the reintegration of knowledge into scientific and societal contexts. This perspective suggests that the participation of non-academic actors is not simply an additional method of collecting information. Instead, collaboration may influence the definition of the research problem, the identification of relevant knowledge, and the development or evaluation of possible responses.

Research on knowledge co-production further highlights the potential contribution of collaboration to the practical relevance of research (Jacobi et al., 2022; Reed et al., 2023). Nevertheless, the application of transdisciplinarity in

Islamic Studies requires attention to the institutional, cultural, and epistemological conditions under which collaboration takes place.

The pesantren environment illustrates this challenge. Religious leaders, teachers, students, local communities, and practitioners may possess forms of knowledge grounded in religious learning, institutional experience, and everyday practice. Their participation can enrich academic understanding of environmental management, educational change, or community development. However, the presence of these actors in a research project does not automatically make the research transdisciplinary.

A distinction must be maintained between participation as a source of data and participation in knowledge production. Interviews with pesantren leaders or observations of students' activities may provide valuable empirical evidence, but these procedures alone do not establish a transdisciplinary design. Stronger transdisciplinary characteristics become visible when relevant actors contribute to identifying problems, developing research priorities, interpreting findings, or evaluating possible responses.

Such collaboration also raises questions about differences in authority, interests, and standards of knowledge validation. Academic researchers and community participants may not share identical expectations regarding research outcomes. Therefore, transdisciplinary research requires explicit procedures for managing these differences without compromising scholarly rigor. The value of collaboration depends not only on participation itself but also on the transparency and critical accountability of the knowledge-production process.

## 4. Methodological Consequences for Doctoral Research Design

The conceptual distinctions identified in this study have direct implications for the design of doctoral-level research in Islamic Studies. At this level, the selection of a multidisciplinary, interdisciplinary, or transdisciplinary approach should be justified through the nature of the research problem and reflected consistently in the research design.

A multidisciplinary study may be appropriate when the primary objective is to map a complex phenomenon through several disciplinary perspectives. Its methodological strength lies in producing a broad account of the dimensions involved. However, researchers should acknowledge when the resulting explanations remain relatively independent rather than presenting them as an integrated theoretical framework.

An interdisciplinary study is more appropriate when the research question requires the integration of concepts, theories, or methods. Repko and Szostak (2021) emphasize the importance of integration in interdisciplinary research.

Accordingly, doctoral researchers should demonstrate the conceptual relationships that justify combining different disciplines and explain how those relationships influence the construction of data and the interpretation of findings.

A transdisciplinary design may be relevant when the research problem requires engagement with knowledge and actors beyond academia. However, the decision to adopt such a design should depend on the objectives of the study rather than on the assumption that community participation is always necessary. Research focused on conceptual clarification, textual interpretation, or historical reconstruction may not require the same collaborative procedures as research addressing practical problems in religious institutions or communities.

These distinctions suggest that methodological justification should address several connected questions: Why does the research problem require more than one disciplinary perspective? What does each discipline contribute? How are their concepts and methods related? What form of integration is intended? If societal actors are involved, what role do they play in producing knowledge? How will the resulting claims be evaluated?

The answers should be visible throughout the research process. A study cannot establish its interdisciplinary character merely by presenting theories from several disciplines in the literature review. Similarly, a transdisciplinary claim requires more than identifying a community as the research location. The methodological orientation must be demonstrated through the formulation of research questions, analytical framework, data collection, analysis, and interpretation.

The findings also reinforce the importance of disciplinary competence. As the National Academy of Sciences, National Academy of Engineering, and Institute of Medicine (2005) explain in their discussion of interdisciplinary research, productive collaboration across fields requires attention to disciplinary differences and the conditions that enable integration. For doctoral research in Islamic Studies, this means that openness to other disciplines must be accompanied by sufficient understanding of their assumptions and methodological standards.

## 5. Theoretical Contributions, Limitations, and Future Research

The principal theoretical contribution of this paper is the clarification of three related dimensions for distinguishing cross-disciplinary approaches in Islamic Studies: disciplinary relationships, forms of knowledge integration, and processes of knowledge production. These dimensions provide a basis for evaluating whether a particular research design is genuinely multidisciplinary, interdisciplinary, or transdisciplinary.

The paper also contributes to discussions of the integrative-interconnective paradigm by emphasizing the difference between philosophical commitments to

knowledge integration and their methodological implementation. Although Abdullah's paradigm offers a significant intellectual foundation for dialogue among knowledge traditions, its application in research requires explicit decisions concerning concepts, evidence, analytical procedures, and standards of justification.

At the same time, this study has limitations. As a conceptual literature-based analysis, it does not provide empirical evidence concerning how multidisciplinary, interdisciplinary, and transdisciplinary approaches are implemented across Islamic higher education institutions. The pesantren example is illustrative and does not represent findings from a particular field site. Furthermore, the conceptual distinctions discussed here should not be treated as exhaustive descriptions of every tradition of interdisciplinary or transdisciplinary research.

Future studies could examine how these approaches are operationalized in doctoral dissertations, Islamic Studies journals, and research programs within Islamic higher education. Comparative analyses of actual research designs could identify the extent to which claims of interdisciplinarity are supported by substantive integration. Empirical studies could also investigate the opportunities and challenges of collaborative knowledge production involving pesantren, religious organizations, and local communities.

Ultimately, the development of cross-disciplinary Islamic Studies requires more than expanding the number of theories or methods used in research. It requires methodological clarity concerning how different forms of knowledge are related, integrated, and justified. Such clarity can strengthen the analytical quality of doctoral research while supporting a more dialogical and contextually responsive development of Islamic Studies.

## Conclusion

This paper has examined the conceptual, epistemological, and methodological distinctions among multidisciplinary, interdisciplinary, and transdisciplinary approaches in Islamic Studies. The analysis demonstrates that the principal difference among these approaches lies not in the number of disciplines involved, but in how disciplinary perspectives are related, how knowledge is integrated, and how knowledge production is organized.

Multidisciplinary research brings together several disciplinary perspectives while generally preserving their respective analytical frameworks. Interdisciplinary research develops substantive relationships among disciplines through the integration of concepts, theories, data, or methods. Transdisciplinary research seeks to cross established disciplinary boundaries and may involve collaboration between academic researchers and societal actors in addressing complex problems. These approaches serve different purposes and should not be understood as a universal hierarchy of methodological superiority.

Epistemologically, the three approaches differ in how they organize and validate knowledge. Their application in Islamic Studies requires particular attention to the relationship between religious texts and traditions, social-scientific perspectives, and other relevant forms of knowledge. Abdullah's integrative-interconnective paradigm provides an important intellectual framework for establishing dialogue among these traditions. However, the practical application of this paradigm requires explicit methodological decisions rather than a general commitment to knowledge integration alone.

For doctoral-level research, the findings emphasize the importance of aligning the research problem, disciplinary perspectives, analytical framework, data collection, and procedures of interpretation. Researchers must justify why particular disciplines are necessary, explain how their contributions are related, and demonstrate the form of integration achieved. When transdisciplinary research is undertaken, the role of non-academic actors in knowledge production should also be clearly specified.

This paper contributes a conceptual framework for distinguishing the three approaches and clarifying their methodological implications in contemporary Islamic Studies. Because the analysis is literature-based, further empirical research is needed to examine how these approaches are implemented in doctoral dissertations, Islamic higher education institutions, and collaborative research projects. Ultimately, the development of cross-disciplinary Islamic Studies depends not on maximizing the number of disciplines involved, but on selecting an appropriate approach and establishing clear, rigorous, and defensible relationships among different forms of knowledge.

## Conflict of Interests

The authors declare that they have no conflict of interest. All research processes, analyses, and interpretations presented in this article were conducted independently and academically. The authors are fully responsible for the content, arguments, and conclusions presented in this study.

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