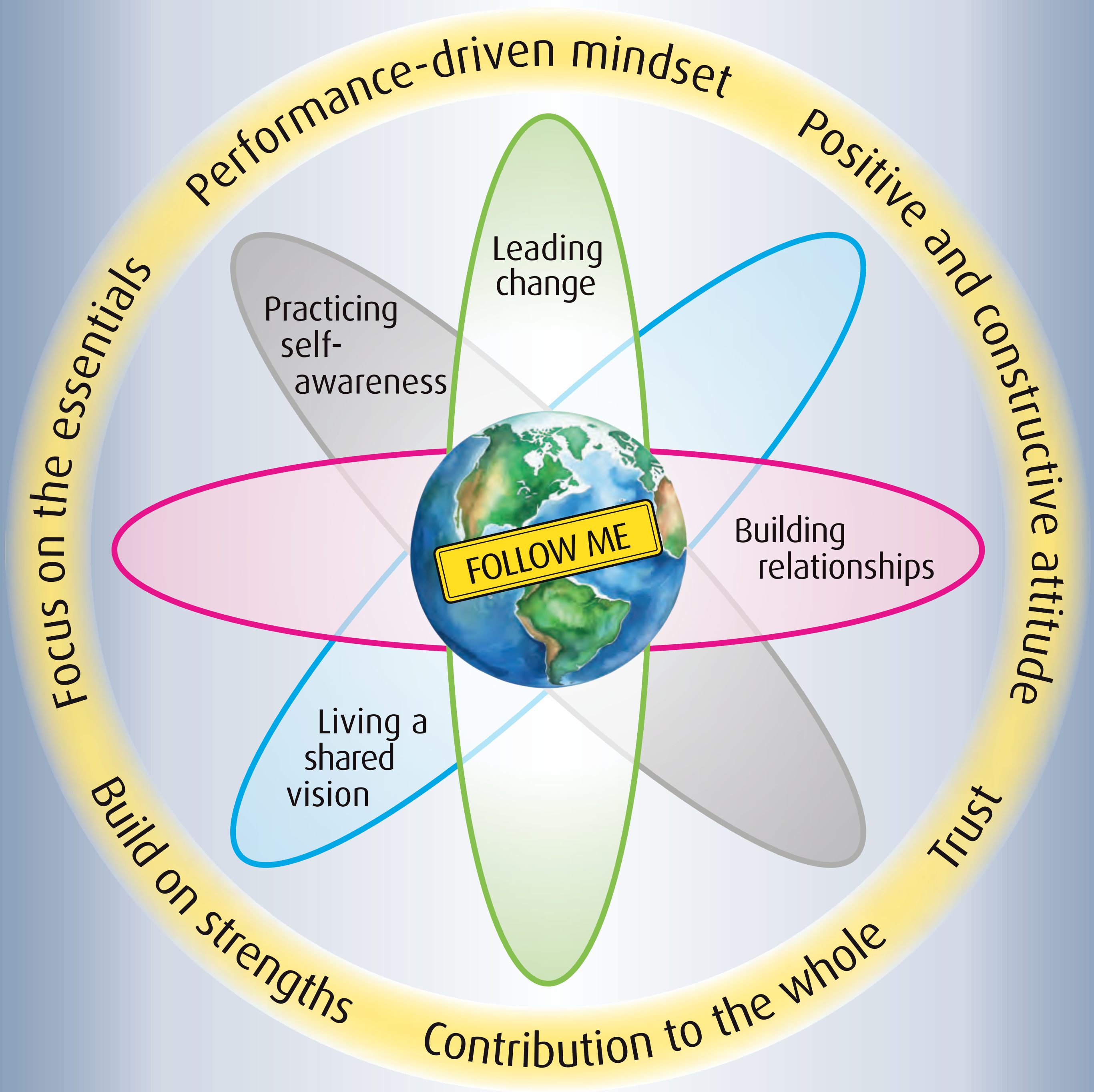
European Journal of Management, Leadership and Health Care

Volume 1 (12) 2024



Meducation Service Publishers
Pabst Science Publishers

Imprint

European Journal of Management, Leadership and Health Care

Edited by
Professor Dr. Michael Neubert
Professor Dr. Peter Kremeier
Responsible for the content

EIM
European Institute of Management
Apt 5, 66, Old Theatre Street
Valletta VLT 1427 Malta
info@eim.education

Published by

PABST SCIENCE PUBLISHERS
Eichengrund 28
49525 Lengerich
Tel. 05484-97234
Fax 05484-550

jml@pabst-publishers.com
www.pabst-publishers.de

and

Meducation Service GmbH
Publishers
Rußheimer Strasse 12
76149 Karlsruhe

jml@meducation.de
www.meducation.de

Design and layout: Beate Hillesheim
beate@hilleshome.de

Publication frequency: Semi-annually

Table of Contents

Otto E. Laske

Measuring Hidden Dimensions: The Art and Science of Fully Engaging Adults

Adults develop over the course of their lives - sometimes little and sometimes dynamically. The analysis of the respective developmental stage can significantly optimize professional personnel work. The German-American psychologist Dr. Dr. Otto E. Laske describes in his handbook - scientifically founded - possibilities of a development-oriented consulting.

The handbook

- addresses all professional groups in human resources management incl. coaching
- makes it possible to understand clients on an extraordinarily differentiated level
- concretizes methods for the analysis of individuals, teams or larger groups
- offers opportunities to understand oneself better
- encourages to further develop the model of developmental stages from a personal perspective
- contains numerous case studies, examples and practical reflections

Intended Readership

This book offers an adult development-based approach to the helping professions with both a detailed theoretical discourse in the form of CDF, the constructive developmental framework, as well as concrete guidance for CDF applications. The book concentrates on the professional practice of coaches, coach supervisors, mediators, mentors, team facilitators, clinical and behavioral psychologists, human resources specialists, and researchers of adult development over the lifespan.

The book's insights are also highly applicable for educators and professional work in social science fields. It provides guidance on how to assist adult learners and students on a psychological level. Notably, it addresses the orientation struggles that occur during early and late teenage as well as early adulthood.

Highlights

- This book introduces a paradigm shift in working with clients and learners in a professional or academic setting by moving the focus of work from an outcome oriented and model-based process towards a dialogue-based, internal and real-time, engagement between parties.
- By integrating research findings in 'social-emotional' development accrued since 1975, especially research of the Harvard Kohlberg School, this book focuses a practitioner's attention to a client's internal conversations to then engage in a dialogue process laying bare how adults, internally and unbeknownst to themselves, construct their positioning in the social world. This entails that rather than focusing on behavior ('Verhalten'), practitioner's attention is focused on how people "make meaning" of themselves as social agents, in dialogue with themselves and, based it, with others.
- The book's foundation in empirical research is described at https://en.wikipedia.org/wiki/Constructive_developmental_framework
- The author bases his constructive developmental framework on the premise that humans take a particular epistemic position which reveals a person's conception of the nature of "knowledge" and "truth". By introducing Robert Kegan's model of meaning making, the book sheds light on how internal conversations are structured epistemically, which then can be communicated and given feedback on in terms of "stages of meaning making".

PABST SCIENCE PUBLISHERS
Eichengrund 28
D-49525 Lengerich/Westfalen

+49 (0) 5484-308
pabst@pabst-publishers.com
www.pabst-science-publishers.com

- The book shows that an individual's social-emotional profile cannot be reduced to his/her 'stage', and that s(he) mentally rather oscillates around a center of gravity associated with three or more substages, typically three.
- A major assumption made in the book is that what people know about themselves and others, as well as how far they can grow into mature adults, is based on their ongoing internal conversations with themselves of which they are largely unaware.
- The book conveys research findings accrued since 1975 portraying how maturity in adults develops in an orderly measurable progression, with a focus on "meaning making" rather than cognitive "sense making" - two different strands of adult development that are, however, closely linked. It spells out and interprets validated empirical outcomes of adult-developmental research in social-emotional and cognitive development over the life span.
- The insights the book is based on are now 45 years old but have remained curiously hidden in the teachings for the aforementioned professions due to a multitude of social and cultural reasons. As a result, the book is a critique of professional ideologies.
- The book shows in detail that meaning making (called 'social-emotional' in contrast to 'cognitive' development) evolves and develops over a person's lifespan in what are five different "stages" (Stufen). Each stage in turn comprises four 'substages' that can be discerned through structured listening in qualitative interviews. Accordingly, the book conveys insight into about 20 stages and teaches how to discern these by applying the CDF framework.
- The major assessment method for understanding and giving feedback on meaning making is qualitative interviewing.
- CDF-based interviews are semi-structured conversations between an "interviewer" (practitioner) and "interviewee" (client). Such interviews represent an art form which can be learned. Teaching experience shows that mastering this new competency of interviewing takes about one year and a half under the guidance of a CDF-expert.
- This book invites and models breaking away from a behavioral and outcome-oriented perspective towards a 'developmental', i.e., knowledge-focused, perspective from which client-answers to the question of "what should I do and for whom" are explored through
- structured dialogue
- Client-answers to this question differ according to the aforementioned five stages.
- Working professionally based on clients' present level of social-emotional development fosters and improves the quality of the practitioner-client (and even colleague to colleague) relationship as it regards behavior as an outcome of level of maturity, and thus an epiphenomenon rather than being the primary focus of work with clients.
- The practice taught in this book fosters a high-level awareness of one's own -- a speaker's or dialogue partner's -- social-emotional maturity level. The CDF practitioner will experience not only a shift and transformation in one's listening to others but also in listening to one's own internal dialogue. Overall, the practices described in the book bring about a 'Revolution der Denkungsart'- a transformation and growth of one's mental processing in real time.
- In summary, this book articulates the pedagogical foundations of 20 years of undergraduate and graduate instruction in developmental coaching and coach supervision, mediation, mentoring, and team development and facilitation at the Interdevelopmental Institute (IDM; www.interdevelopmentals.org), delivered in international cohorts in English, French, German, and Spanish.

Having proven its worth in practice and for many practitioners, the book is ready to be used for introspection and reflection, learning, teaching and examinations at learning institutions, colleges, universities, social agencies, as well as in any setting or program for executive and team development.

460 pages, ebook
ISBN 978-3-95853-831-3

20,00 €
incl. VAT

PABST SCIENCE PUBLISHERS
Eichengrund 28
D-49525 Lengerich/Westfalen

+49 (0) 5484-308
pabst@pabst-publishers.com
www.pabst-science-publishers.com

Welcome to the Inaugural Edition of the European Journal of Management, Leadership and Health Care

We are delighted to welcome you to the first edition of the *European Journal of Management, Leadership and Health Care*, a publication dedicated to fostering academic inquiry and dialogue in the dynamic fields of management and leadership. This journal serves as a bridge between theoretical insights and practical applications, providing a platform for researchers, practitioners, and thought leaders to contribute to the ongoing evolution of knowledge in these areas. We are committed to upholding the highest standards of quality in the research we publish, ensuring that every contribution meets rigorous academic and professional benchmarks. Our primary goal is to promote high-quality academic research that advances both theory and practice, offering valuable perspectives that can shape the future of management and leadership across various organizational and cultural contexts, while also serving as a bridge between academia and industry.

This edition highlights timely and diverse topics such as healthcare, technology adoption, and business ethics, showcasing the breadth of research opportunities in management and leadership. By examining these themes, we aim to provide insights that are not only academically rigorous but also practically relevant.

Scope and Contribution: What We Publish

The *European Journal of Management, Leadership and Health Care* accommodates a wide range of scholarly contributions, each serving a unique purpose in the academic and professional landscapes. We invite submissions of original research in the form of:

1. **Research Articles**: In this edition, these include definition articles that clarify and refine theoretical constructs, systematic literature reviews that provide comprehensive overviews of specific domains, and quantitative studies offering empirical insights.
2. **Case Studies**: Articles that delve into real-world organizational scenarios, highlighting challenges, strategies, and outcomes to inform practice and further research.
3. **Review Articles**: Summative and critical analyses that integrate findings from multiple studies, providing a broader perspective on specific topics.
4. **Opinion Pieces and Essays**: Thought-provoking contributions that offer new perspectives, challenge prevailing paradigms, or propose innovative frameworks for consideration.
5. **Methodological Contributions**: Papers focused on advancing research methods or tools relevant to management and leadership studies.
6. **Interdisciplinary Works**: Studies that explore intersections between management, leadership, and other fields such as psychology, sociology, economics, and technology.

By embracing this diversity of formats, we aim to encourage a holistic exploration of management and leadership, ensuring that our content resonates with a broad audience of academics, practitioners, and policymakers.

A Summary of Articles in This Edition

This inaugural edition features three compelling research topics:

1. *The Adoption of AI-Based Smart Home Technologies* by Timur Kuziaev. This quantitative study demonstrates how different age groups, specifically Millennials and Generation Z, adopt new consumer technologies differently. Kuziaev applies technology acceptance models across various age groups, offering significant contributions to understanding generational dynamics in technology adoption.

2. *Altrocentric Business Ethics: A Definition and Systematic Literature Review* by Burkard Schemmel and Karsten Bredemeier. This work lays a solid foundation for future research by proposing a definition of altrocentric business ethics and synthesizing existing literature on the topic. Their research provides critical insights and a framework for subsequent investigations in this field.

3. *Customer Perceptions of Social Media's Influence on Expectations for Beauty Treatments* by Ameni Aloui. This study highlights the theoretical and practical significance of understanding how social media shapes often unrealistic customer expectations regarding cosmetic treatments. Aloui's work underscores the need for further research to address these challenges.

Acknowledging Our Authors

The success of this inaugural edition owes much to the dedication, expertise, and creativity of our contributors. Our authors represent a diverse array of institutions, disciplines, and professional backgrounds, reflecting the global and multidisciplinary nature of the journal. Their work exemplifies a commitment to advancing knowledge and fostering practical innovation in management and leadership. We are immensely grateful for their efforts and are confident that their contributions will inspire and inform readers worldwide.

Below are brief profiles of the authors in alphabetical order:

1. **Ameni Aloui**: A doctoral candidate and successful business owner with expertise in bridging theoretical insights and practical applications in beauty and wellness management. She is the founder of the MBC Köln institute, which focuses on advanced education in beauty consultancy and therapy.
2. **Dr. theol. Karsten Bredemeier**: Professor of Practice, executive coach, and rhetorical trainer specializing in altrocentric business ethics. Dr. Bredemeier's extensive work integrates ethical decision-making with effective communication strategies for leaders.
3. **Timur Kuziaev**: An experienced project manager and research assistant with an MBA in Telecommunications Management, Kuziaev's work focuses on innovative technologies, business models, and emerging markets. His research bridges technology adoption with generational dynamics, providing practical insights into market strategies.
4. **Burkard Schemmel**: A seasoned senior manager and entrepreneur with a focus on business ethics and leadership practices. Schemmel's interdisciplinary research contributes to redefining ethical leadership models for modern enterprises.

As we embark on this journey, we invite scholars and practitioners to join us in shaping the future of management and leadership research. We look forward to your feedback, submissions, and continued engagement with the *European Journal of Management, Leadership and Health Care*.

Peter Kremeier and Michael Neubert, Editors

A Systematic Literature Review of the Financial Impact of Business Ethics operations in Companies in Europe with a specific focus on Alterocentrism

Burkard Schemmel, Karsten Bredemeier
EIM – European Institute of Management, Valetta, Malta

Abstract

Business ethics is an ever-evolving field of theoretical and practical study that has enjoyed a steady stream of interest with a hockey stick of attention since globalization, especially global collaboration, which took off after 2000. There is a relatively new movement towards alterocentric ethics, a philosophical approach that places the "other" at the center of a company's consideration. Alterocentric ethics asks businesses to integrate responsibility toward stakeholders, the community, and the environment as intrinsic components of their operations. This study systematically reviews current literature on alterocentric business ethics. we applied a structured search methodology across academic databases, using predefined eligibility criteria to examine existing scholarly work comprehensively.

Based on the past five years' publications, there is a growing consensus that ethical behavior fulfills moral obligations, can contribute to a contemporary corporate strategy, and can even be seen as an asset when implemented consistently. Many attempts have been made to link ethical business practices, including corporate social responsibility (CSR), fair trade, sustainability, and ethical labor practices, to financial performance, customer satisfaction, employee engagement, corporate reputation, and long-term sustainability. Still, the actual financial implications of ethical operations are under-researched, or in other words, the link between ethical initiatives and quantifiable business benefits is not always stringent. There is a general consensus on the positive financial impact of ethical operations, but specific gaps remain in developing integrated frameworks that incorporate both financial and non-financial metrics. This leads to the fact that a comprehensive assessment of business success under ethical operations is not yet possible: Further research is needed to refine measurement tools for ethical operations for financial and non-financial KPIs and across various industries. We believe addressing these gaps will be pivotal for understanding how ethical leadership and culture contribute to financial outcomes.

#Keywords

Business Ethics, Ethical Leadership, Financial Performance, Customer Satisfaction and Loyalty, Employee Engagement and Retention, Corporate Reputation, Sustainability and Long-term Success, Alterocentric, Altruism.

DOI: 10.2440/013-0001

Eine systematische Literaturanalyse zu den finanziellen Auswirkungen geschäftsethischer Praktiken in europäischen Unternehmen mit besonderem Schwerpunkt auf dem Konzept des Alterozentrismus

Die Geschäftsethik ist ein sich ständig weiterentwickelndes Feld der theoretischen und praktischen Studien, das seit der Globalisierung – insbesondere der globalen Zusammenarbeit, die nach 2000 an Bedeutung gewann – ein stetiges Interesse und eine sprunghaft ansteigende Aufmerksamkeit genießt. Es gibt eine relativ neue Bewegung hin zu alterozentrischer Ethik, einem philosophischen Ansatz, der das „Andere" in den Mittelpunkt der Überlegungen eines Unternehmens stellt. Alterozentrische Ethik fordert Unternehmen auf, Verantwortung gegenüber Stakeholdern, der Gemeinschaft und der Umwelt als

DOI 10.2440/013-0001

intrinsische Bestandteile ihrer Geschäftstätigkeit zu integrieren. Diese Studie überprüft systematisch die aktuelle Literatur zur alterozentrischen Geschäftsethik. Wir haben eine strukturierte Suchmethodik über akademische Datenbanken hinweg angewandt und vordefinierte Auswahlkriterien genutzt, um die vorhandene wissenschaftliche Arbeit umfassend zu untersuchen.

Basierend auf den Veröffentlichungen der letzten fünf Jahre gibt es eine wachsende Übereinstimmung darüber, dass ethisches Verhalten moralische Verpflichtungen erfüllt, zu einer modernen Unternehmensstrategie beitragen kann und sogar als Vermögenswert angesehen werden kann, wenn es konsequent umgesetzt wird. Viele Versuche wurden unternommen, ethische Geschäftspraktiken wie Corporate Social Responsibility (CSR), Fair Trade, Nachhaltigkeit und ethische Arbeitspraktiken mit finanzieller Leistung, Kundenzufriedenheit, Mitarbeiterengagement, Unternehmensreputation und langfristiger Nachhaltigkeit zu verknüpfen. Dennoch sind die tatsächlichen finanziellen Auswirkungen ethischer Geschäftspraktiken unzureichend erforscht. Mit anderen Worten: Der Zusammenhang zwischen ethischen Initiativen und quantifizierbaren Geschäftsvorteilen ist nicht immer eindeutig. Es herrscht ein allgemeiner Konsens über die positiven finanziellen Auswirkungen ethischen Handelns, doch es bestehen spezifische Lücken bei der Entwicklung integrierter Rahmenwerke, die sowohl finanzielle als auch nicht-finanzielle Kennzahlen einbeziehen. Dies führt dazu, dass eine umfassende Bewertung des Geschäftserfolgs unter ethischen Gesichtspunkten noch nicht möglich ist: Weitere Forschung ist notwendig, um Messinstrumente für ethisches Handeln sowohl für finanzielle als auch nicht-finanzielle KPIs und über verschiedene Branchen hinweg zu verfeinern. Wir glauben, dass die Schließung dieser Lücken entscheidend dafür sein wird, zu verstehen, wie ethische Führung und Kultur zu finanziellen Ergebnissen beitragen.

對歐洲公司商業道德運營的財務影響的系統文獻綜述，特別關注交替中心主義 *(Alterocentrism)*

商业伦理是一个不断发展的理论和实践研究领域，自全球化以来，尤其是2000年后全球合作兴起以来，它吸引了持续的关注，并在关注度上呈现出“曲棍球棒”式的增长。近年来，一种相对较新的运动——“他者中心伦理”正在兴起。这是一种哲学方法，将“他者”置于公司考虑的核心。他者中心伦理要求企业将对利益相关者、社区和环境的责任融入其运营的内在组成部分。这项研究系统性地回顾了关于他者中心商业伦理的现有文献。我使用了结构化的搜索方法，在学术数据库中根据预定义的标准全面审查了现有的学术研究。

根据过去五年的出版物，人们越来越一致地认为，伦理行为不仅履行了道德义务，还可以成为现代企业战略的一部分，甚至在持续实施时被视为一种资产。许多研究尝试将商业伦理实践（包括企业社会责任、公平贸易、可持续发展和伦理劳动实践）与财务绩效、客户满意度、员工参与度、企业声誉和长期可持续性联系起来。然而，关于伦理经营的实际财务影响研究尚不充分。换句话说，伦理举措与可量化商业利益之间的联系并不总是严格清晰的。人们普遍认同伦理经营对财务的积极影响，但在开发既涵盖财务又涵盖非财务指标的综合框架方面仍然存在具体的差距。这导致目前尚无法全面评估在伦理经营条件下的商业成功：需要进一步的研究来完善针对财务和非财务关键绩效指标（KPI）以及跨行业的伦理经营测量工具。我们相信，解决这些问题将对理解伦理领导力和文化如何促进财务成果具有关键意义。

DOI 10.2440/013-0001

Introduction

Throughout its development, the domain of business ethics has been codified by egoistic and anthropocentric ideas that place personal gain or human interests as primary, if not paramount, at times at the expense of more significant social and ecological concerns. Egoistic business ethics is conceptually rooted in classical economic theory, which posits that businesses function best in the pursuit of self-interest and that market mechanisms will naturally self-regulate for a benefit for society (Friedman, 1970). Similarly, anthropocentric ethics maintain that human interests are paramount. Such a perspective often legitimizes natural resource exploitation while overlooking the needs of non-human species and systems per se (Norton, 1991). Notwithstanding, these approaches have brought about various problems, including income disparity, social injustice, and environmental disintegration (Banerjee, 2011).

An alterocentric economic ethic has developed as a counterpoint, shifting focus away from the self or human interests and toward the "other," whether that be other humans, non-human species, or future generations. This perspective challenges the anthropocentric assumption that corporations are fundamentally profit-seeking organizations with the highest regard for the interests of the human species. Instead, it espouses a relational and holistic approach that considers all stakeholders inherently worthy: people in poverty, ecosystems, and generations yet to come (Plumwood, 1993). Alterocentric ethics is therefore emerging as the rising awareness of mutual human, and natural interdependence creates a new imperative for new thinking on business.

The fundamental importance of such an alterocentric business ethics is found in how it can address fundamental issues regarding social justice and environmental sustainability. With the focus thrown on the well-being of others, this will inevitably contribute to discussions about issues of inequity and exploitation in global commodity chains and care for the ethical treatment of all stakeholders, from employees and consumers to communities and the environment, as Shiva (1988) points out. Alterocentric ethics further support business practices of sustainability, which protect the ecological systems and the rights of nonhuman beings (Naess, 1989). Such an ethical framework also goes hand in glove with the indigenous and feminist perspective about the relational nature of care and well-being within communities (Noddings, 1984).

Research indicates that an alterocentric approach can enhance stakeholder trust and loyalty, as it demonstrates a commitment to ethical principles that prioritize collective benefit over individual gain. For example, studies of CSR show that businesses emphasizing values of alterocentricity often realize a competitive advantage by generating a better brand reputation and increasing customer loyalty because the company is seen as the more ethical and responsible organization in society (Gallagher, 2013). The research of Gabriele Faber-Wiener and Bettina Gjecaj entitled Credibility and Trust offers some excellent insight into the critical importance that trusting relationships and credibly perceived behavior have as foundational elements in ethical business practices, especially as applied to the business-nonprofit interface. Their process emphasizes an alterocentric ethic that seeks to make mutual benefit, transparency, and community impact the priorities over egocentric profit. This ethical approach highlights the importance of partnership at "an equal level," based on credibility, legitimacy, and openness reinforcing one another. It thus fits within an alterocentric approach, instilling a level of trust that exceeds a more transactional relationship. Faber-Wiener and Gjecaj provide models such as the "Roadmap for Equitable Collaboration" and a "Code for Transparent Collaboration," which provide a framework for ethical partnership and direct attention to stakeholder needs. Their model, therefore, advocates for CSR activities based on legitimacy and social benefit, driven by alterocentric principles, embracing practices beyond mere profitability to serve the common good. The study contributes to the literature by providing ordered ways of ethical collaboration and motivating an organization to adopt practices that would foster trust and credibility together with alterocentric ethics. However, heightened interest in the connection of ethical business practices with financial performance has only recently emerged, and considerable research gaps exist.

Although it is indicated that ethical practices - such as sustainability initiatives or ethical leadership - can positively influence financial performance, the inconsistency of these findings bounds our understanding (Alshehhi et al., 2018; Liu & Lin, 2020). Most, for instance, focus on short-term profitability measures while failing to address how ethical practices affect financial health in the long term and across industries (Paine, 2003). Besides, extant studies focus on large companies in developed countries, hence not making significant consideration for SMEs and companies in developing countries (Alshehhi et al., 2018). Future research is needed to investigate the issues with longitudinal approaches and a broader set of financial measures to determine the impact of ethical behavior on corporate performance in different contexts.

Nevertheless, despite the benefits, applying an alterocentric ethic in the business world remains challenging, as the prevailing egocentric paradigm in the capitalist economy emphasizes self-interest and competition, thus creating tensions among companies trying to set up an alterocentric model. There is a growing interest in this ethical perspective. Still, very little systematic empirical research considers the impact of alterocentric ethics on business performance and how the firm manages conflicts between the interests of the communal and the individual. These latter omissions may yield further insight into how organizations can practically foster alterocentric ethics to support sustainable and ethical businesses.

The paper discusses the emergence of alterocentric business ethics, its underlying theory, and its practice in the modern economy. These are juxtaposed with egoistic and anthropocentric ethics to analyze the use of the alterocentric perspective in facilitating organizations to handle such thorny issues as social justice, care for the environment, and interdependence of global economic systems.

Methods

This paper aims to review the literature on business ethics, considering the relevance and quality of materials in light of the rigorous research methodology (Neubert, 2022). A systematic literature review is a qualitative research method (Halkias et al., 2020; 2023). Eligible contributions include those from peer-reviewed journal papers, academic books, and conference proceedings targeting business ethics in terms of either theories, applications, or critiques. These studies were selected because they focused on concepts and models relevant to studying ethical business practices. In the selection, emphasis was placed on works that addressed these various subtopics. Major sources consulted included JSTOR, Scopus, Web of Science, and Google Scholar. A detailed search was done for the selected articles. Some of the keywords used in this search strategy include "Alterocentric Business Ethics," "Financial Performance," and "Measurement in Business Ethics," combined using Boolean operations to refine the outcome.

There are two steps for study selection in this review. First, a preliminary title/abstract review removes studies that do not fit the selection criteria; the next step is a full-text review of most articles that could reasonably be expected to meet the eligibility criteria. Second, two reviewers will independently review all studies to minimize selection bias. Disparities will be discussed until a resolution is reached. Data extraction categorized the identified studies in terms of their theoretical focus, approaches to conducting research, and identifiable findings in terms of ethical frameworks; data extracted were documented on a pre-specified data extraction template. The risk of bias was assessed with the support of quality assessment instruments such as the CASP tool for qualitative research, which supported judgment of validity and relevance for each study within the discursive context of ethics. Data synthesis was completed via a qualitative approach, where findings were categorized into leading themes, including theoretical frameworks, ethical applications across various industries, and implications for financial performance. These provided a thematic categorization that gave a systematic basis for discussing contemporary trends, challenges, and advances that characterize the study area of business ethics.

Definitions

Business Ethics

Business ethics can be defined as the moral course of conduct that steers decision-making processes in organizations whenever confronted with moral dilemmas and competing interests. Ethical business decisions must consider the immediate consequences and their long-term effects on all stakeholders: customers, employees, shareholders, and communities. The ethical organization acts in an alterocentric fashion. It infuses transparency, equity, and accountability in its structure so that business operations - from resource allocation to corporate governance - align in an integrative approach with social responsibility, stakeholder welfare, and sustainability outcomes (Schemmel, 2024).

Financial performance

Financial performance is the overall measure of a company's ability to return profits and conduct effective resource management during a certain period. Typically, it is measured with the help of numerous KPIs that allow analysts to view a company from different angles of financial perspective. Revenue growth denotes the growth of a company's sales over a certain period of time and reflects a company's ability to enlarge its market share and boost its profitability. The net profit margin indicates what part of the revenue remains as profit after deducting all costs and, therefore, is a very important indicator of operational efficiency. EBITDA reflects operating performance due to the focus on earnings through the main course of business, excluding the effects of financing and accounting decisions. ROIC is the net operating profit after tax divided by the invested capital that, in its essence, shows how effectively the company generates returns for the capital invested in operating processes and underlines managerial efficiency in resource usage. At the same time, Cash Flow is the net amount of cash transferred within a business to be able to maintain liquidity and sustain operations. Accordingly, all these KPI indicators help stakeholders such as investors, creditors, and management to make investment decisions regarding a company's strategic direction, depending on its financial health (Pwskills, 2023; Agicap, 2023; DealHub, 2023).

Alterocentrism

Alterocentrism is an ethical orientation where the needs, views, and welfare of others are of more value than the interests of oneself. The individual contemplates himself as being related to others. The relational ethics approach thus evokes sympathetic and unselfish concern. The alterocentric persons communicate mainly in the interest of their partners' needs, often at their own expense, towards common development and general satisfaction (Bratchenko, 2018). This contradicts the egocentric perspective, which is wholly interested in self-interests and personal benefits. According to Vorobyova, alterocentrism has some outstanding meanings in psychology, sociology, and business ethics since it en-

 DOI 10.2440/013-0001

dorses supportive-cooperative relationships, which may turn out to be more productive in the creation of better ethical decisions and greater social responsibility (Vorobyova, 2018).

Results

Indeed, various studies over the past five years concerning the impact of ethical behavior on business outcomes have repeatedly shown that good ethical practices are positively related to business success indicators such as financial performance, customer satisfaction, employee engagement, and even general corporate reputation.

For this, the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) method was applied, which included a systematic approach to resource extraction, review processes of identification, screening, eligibility, and data abstraction, along with analysis. PRISMA is a published standard that helps the researcher carry out a systematic literature review. According to Shafrill et al. (2019), the methodology of PRISMA is as follows. This universal standard was developed by a panel of authors, methodologists, clinicians, medical editors, and consumers (Moher et al., 2009). This approach has conventionally been applied in reviewing reports

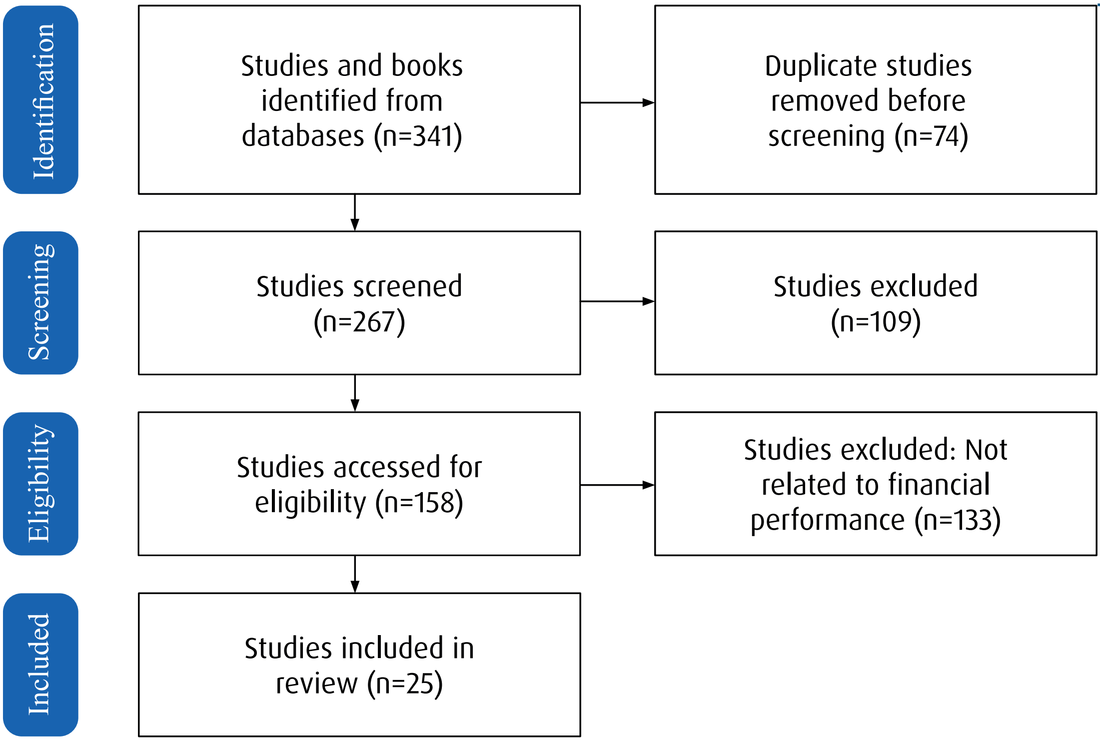


Fig. 1: *PRISMA Flow Diagram*

related to clinical trials and other medical studies. These days, however, PRISMA is widely adopted as the foundational approach in reporting systematic reviews in the arenas of studies such as environmental management - Shaffril et al., 2019; accounting disclosure - Ah Choi & Joseph, 2020; and finance - Bhowmik & Wang, 2020. This approach has been adopted within the area of business ethics by several researchers as well, including, among others, Joseph et al. (2023) and Daradkeh (2023). In this respect, it is discerned that PRISMA guidelines allowed for an extensive, in-depth examination of terms relevant to business ethics' definitions. Figure 1 further outlines the PRISMA method.

Comprehensive Results

Over the past five years, research has underlined that besides the call of morality, ethical conduct offers business companies a strategic advantage in terms of better economic performance, customer loyalty, employee commitment, corporate image, and long-term viability. These all show that investing in ethical practices is one of the judicious ways to achieve holistic success in business.

More precisely, the financial impact of ethical business operations has become a recent focus of many contemporary business studies. Ethical business operations include CSR, fair trade, sustainability, and ethical labor practices. Therefore, this paper explores and examines the literature gaps concerning the financial impact of ethical business operations. This study will review the literature concerning the relationship between ethical business conduct and financial performance by indicating cutting-edge studies and pointing to further research that is still necessary for a better understanding of this area.

Themes

Financial Performance

Much literature has indicated that companies performing ethically are bound to realize better economic performance than those not performing well in ethical terms. A meta-analysis by Wang and Calvano (2020) explains that firms with strong cultures and practices tend to indicate better financial performance because of increased customer loyalty and trust, hence increasing sales and profitability. In addition, Ferrell et al. (2019) also showed that ethics reduce risks and legal costs while increasing investor confidence, guaranteeing sustained financial stability and development.

Business ethics and financial performance are inextricably intertwined, becoming one of the primary concerns of business ethics studies. Indeed, there is a wide variety of literature on how ethical behavior increases the likelihood of a company's positive financial performance. These companies tend to give better profits than those that do not consider ethics due to customer loyalty, investor confidence, and reduced legal complications. A recent meta-analysis by Wang and Calvano (2020) showed convincing evidence that firms with high-ranking ethical cultures and practices tend to perform well financially. It combines data across various industries and regions on how ethical companies demonstrate better sales and profitability due to increased customer loyalty and trust. This indicates that consumers are more likely to purchase from firms perceived to be ethical, even at some cost to themselves, thereby providing firms with revenues that are more assured of being longer-lived. Moreover, the research shows that companies with ethics can attract employees with a highly qualified sense of purpose, leading to productivity and operational efficiency.

Another important work was done by Ferrell et al. (2019), who researched how a company's ethical conduct affects its internal and external evaluation to contribute to its financial stability. According to their observations, ethical company performance tends to reduce the risks of fines, litigation, and compliance costs, which, in most cases, are higher in industries with a greater tendency towards ethics, such as financial and pharmaceutical ones. This would enable ethical companies to utilize better resources for growth initiatives. Additionally, Ferrell et al. (2019) indicate that companies with ethical behavior tend to have better avenues for improved capital availability by investors seeking stable, risk-free investment sources and, therefore, upgrading their market valuation.

Apart from these direct financial gains, research has also identified certain peripheral benefits from ethical conduct through reputation and brand equity, adding to the direct financial gains. For instance, Orlitzky et al. (2003), in their seminal meta-analysis, found that ethical conduct and social responsibility contribute positively towards corporate reputation, an intangible asset that is characterized by a very strong linkage to long-run financial performance. A good reputation for ethical behavior draws in socially conscious consumers and investors, creating a self-sustaining virtuous cycle of trust and profit. This view has been reiterated in many recent research studies, including a 2021 published report by the Governance & Accountability Institute that found high-rated ESG companies consistently outperform the market. The stakeholder and investor portrayal of increased value to ethical practices is something to which the outperformance to date can be credited.

Indeed, a case study by Eccles, Ioannou, and Serafeim (2014) revealed that companies that are truly concerned about sustainability and ethics resist an economic downturn more strongly. Their findings revealed that more significant commitment from employees and customers significantly determines a business's ability to maintain its revenue levels and protect the bottom line during unfavorable economic conditions. These results indicate that ethical practices reinforce short-term financial betterment and, at the same time, long-term robustness and stability.

Customer Satisfaction and Loyalty

Research has also indicated that consumers lean toward business activities demonstrating ethical conduct and behavior. This would explain why, for instance, Singh et al. (2021) opined that firms viewed as ethical are more likely to acquire and retain customers, ensuring customers' satisfaction and repeat business. Indeed, in an in-depth analysis, Murphy and Schlegelmilch (2020) established that ethical marketing and transparent business practices help consumers better trust and build loyalty.

Most literature on business ethics has focused on how implementing ethical practices impacts customer satisfaction and loyalty. Business ethical practices have repeatedly been related to enhancing customer relationships due to buyers' increased appreciation of ethical behavior and social responsibility in organizations they endorse. Similarly, research in the area has demonstrated that firms perceived to be ethical facilitate customer loyalty, satisfaction, and positive brand perception, which are some of the key reasons for repeat business and long-term customer relationships.

Singh et al. (2021) witness a significant relationship between perceived ethical behavior and customer loyalty. Their survey data of over 500 consumers show that customers would stay with those firms that emphasize ethical values, transparency, and equity principles in every transaction. The study further showed that customers, believing a company shares their ethical and social values, would be willing to tolerate minor service failures and, hence, be more trusting and patient. A relationship involving ethics and customer loyalty means that ethical business practices give rise to a competitive advantage because emotional connections with customers are built, thus improving customer satisfaction ratings and a more substantial brand reputation.

Such findings agree that ethical marketing and open business operations are quintessential factors for garnering customer trust. Authors' opinion- "Today's customers are fairly aware of the ethical position of a company, which they can acquire from social networking sites, online reviews, or reports on corporate transparency. The outcome is that through ethical marketing, truthful, transparent, and socially responsible advertising companies gain a better reputation, thus cementing loyalty and satisfaction. Continuing with the explanation by Murphy and Schlegelmilch, "customers who trust a brand will more likely be ready to recommend the brand to other people," which means extended reach and more considerable customer loyalty.

Ethical businesses can also contribute to customer satisfaction by responding to consumer calls for social and environmental responsibility. Ethics-based initiatives, like not using child labor, engaging in environmentally sensitive production, or giving back to local communities, cultivate a loyal clientele and a type of customer who shares in their social awareness. Lavorata and Pontier said that environmentally and socially responsible companies would measure higher levels of customer satisfaction. The reasons are derived from the increase in consumers who will start being more appreciative of these dimensions intrinsic in their general relationship with every brand. In this case, it is trending nowadays that consumers do not consider corporate responsibility an obligation but part of the value for which one buys every product or service.

A different approach by Green and Peloza (2011) focuses on how ethical practices can reduce negative customer responses when customers perceive corporate wrongdoings or any other crisis involving a corporation. Their study revealed that firms with strong ethical reputations are more likely to retain customer loyalty during times of crisis because customers give such firms the benefit of the doubt. Actually, in the event of product recalls and service failure, loyal customers of ethical firms would be less likely to desert the brand, thereby showing that the resilience of the relationship is intrinsic.

These studies indicate that ethical business practices are essential in ensuring customer satisfaction and loyalty by instilling confidence, resonating with consumer values, and enhancing the consumer experience. Companies that implement the code of ethics in their core functions and marketing strategies receive high customer loyalty and appear as responsible brands to today's consumers in immensely competitive markets.

Employee Retention and Engagement

The literature also suggests that organizational ethical conduct is related to higher employee commitment and retention. Indeed, one comprehensive study by Brown and Treviño reported that ethical leadership, combined with a culture of integrity, leads to job satisfaction, lower turnover, and increased employee commitment. If employees perceive their organization to be ethical, chances are that they value and feel motivated; thus, they are more productive with higher morale.

Indeed, the tendency to realize that ethical conduct inside organizations touches many facets of employee engagement, job satisfaction, and retention has increased. Individuals who consider their organization ethical are more motivated, committed, and loyal to their employers. A decent environment of trust, respect, and openness will not be missing from an ethical workplace; it is crucial for maintaining the morale and productivity of workers at a continuously high level.

Brown and Treviño presented a comprehensive study indicating that ethical leadership - that is, where leaders exhibit integrity, honesty, and fairness positively related to higher levels of job satisfaction and reduced turnover. The study establishes that when leaders act ethically, the standard trickles into the organization, bringing a culture of integrity that reverberates with the employees. Workers in ethical working environments develop an increased sense of respect and appreciation, leading to increased organizational commitment. Further, ethical leadership allows employees to develop a greater understanding of attachment and identification with the values espoused by an organization, thus resulting in lower turnover intentions and greater overall job satisfaction.

Another relevant contribution to this debate was made by Kim and Brymer 2019, who investigated the role of ethical organizational culture in employee retention. The authors conceptualized such culture as policies and practices that correspond to ethical values and, therefore, give rise to a work climate with values such as justice, openness, and responsibility in which employees become committed to organizations. The results indicated that the perceived organization that upholds ethical standards was more likely to ensure that employees stayed on because one feels secure and respected in such an environment. Such a perception of organizational sup-

DOI 10.2440/013-0001

port and respect encourages loyalty but simultaneously enhances it. This boosts employees' morale because they feel their contributions to an organization are appreciated, and their well-being is considered.

Ethical behavior in the workplace enhances employee engagement due to the alignment of personal and professional values. In support, a study conducted by Valentine, Godkin, and Lucero (2020) elaborates that, in the event of a fit view, employees' perception of organizations being ethical makes them usually highly engaged. This means that if employees perceive their employer's contribution as a positive societal factor, they are more likely to find purpose in their actions, thus increasing engagement and productivity. Valentine et al. (2020) suggest that ethical contexts and settings increase employees' morale and well-being, thus creating a vicious circle of motivation, commitment, and high performance for the best.

Besides, highly ethical companies tend to know how to recruit and retain some of the best employees, as people increasingly want to work for companies whose values align with their own. In the 2021 survey of the Chartered Institute of Personnel and Development, more than 70% of employees reported that ethics practices were essential in choosing an employer. This underpins the developing trend where employers, particularly the young generation, favor ethical organizations that pay much attention to social responsibility and work ethics.

It fosters a healthy working environment that minimizes workplace stress and conflict, further contributing to retention. According to Mayer et al. (2012), ethical behavior reduces the reasons for workplace bullying, harassment, and discrimination, regarded as common causes of employee turnover. Indeed, various studies reported that organizations that had explicit ethical guidelines and codes of conduct showed reduced misconduct; this, in turn, created a safer and more supportive environment where employees would feel well-protected and valued. It enhances the well-being of the employees and makes them stay in an organization for a longer time.

All these findings have led to the fact that ethical conduct and leadership in organizations create an enabling, transparent, and values-oriented workplace that positively affects employee engagement, morale, and retention. Thus, organizations practicing ethics have a motivated and loyal workforce and provide an environment appealing to top talents, enabling them to achieve sustainable organizational success.

Corporate Reputation
Ethical behaviors of a firm largely affect the reputation of the company. According to studies by Fombrun and Pan (2019), firms with high levels of ethical reputation enjoy the trust and esteem of the general public and have less likelihood of crisis issues, hence being able to sustain themselves in the long term. This is further supported by the work of Elkington, 2020, in establishing that ethical firms are more likely to be perceived as leaders in CSR and, through this channel, their overall brand value and reputation improve.

Corporate reputation, considered one crucial intangible asset, is closely related to a company's ethical behavior. Indeed, reputation has gradually become an indispensable factor in business success because it influences how stakeholders, including consumers, investors, employees, and regulators, perceive and deal with a company. Indeed, ethical behavior positively influences corporate reputation because it builds trust, loyalty, and respect among various stakeholders, thereby improving the company's resistance and long-term sustainability.

According to a research study by Fombrun and Pan, ethical behavior related to corporate reputation enhancement presents a statistically significant contribution. It shows that companies reputed for their strong ethical practices and commitment to social responsibility enjoy higher levels of public trust and respect that act like buffers in times of crisis. Companies that build and manage ethical brands are more likely to benefit from the doubt from relevant stakeholder groups in case bad things happen, such as product recalls, financial turmoil, or scandals at the top management level. This positive effect of ethical branding is sometimes called a "reputation buffer," insulating companies against some of the adverse effects of crises on brand and financial performance. Fombrun and Pan's work suggests that ethical firms with better reputations experience less reputational loss during a crisis than less ethical ones.

Elkingtom, 2020, expanded on the relationship between corporate ethics and reputation, finding that firms with good ethical standing were likely to be viewed as leaders in CSR. His work showed that an ethical company is often a good corporate citizen, mainly where its activities reflect positive contributions to society through environmental sustainability, fair labor, and community development. Such companies develop good public images that increase added value to their brands and differentiate them in the market. Ethical reputation has lately been a high factor of competitiveness, and attention is paid to those companies that stand out with a high level of ethics.

Indeed, the business benefits of a good ethical reputation extend beyond consumer perceptions to bear upon other key stakeholder constituencies, such as investors and employees. For example, results from Luo and Bhattacharya indicate that firms with good ethical reputations attract more socially responsible investors who perceive them as less risky and thus have better access to capital. Corporations perceived as socially responsible would, therefore, gain the trust of more institutional investors who factor in ESG in their decision-making in investments. Indeed, research findings indicate that a good ethical reputation complements good stock performance because ethical practices reflect stability, transparency, and management of risks for possible investors. Luo and Bhattacharya's results also support the idea that an ethical reputation is both a catalyst in driving corporate value and a shock-absorbing factor contributing to financial sustainability.

Furthermore, it has also been determined that ethical reputation affects the attraction and retention of talent; business organizations with ethical reputation can attract better candidates as job applicants wish to work with those companies whose values align with their values and can offer them a healthy and respectable workplace environment. The development of loyalty and commitment as a congruence of personal values with organizational values results in higher retention rates and reduced turnover. Jones et al. (2014) state that a strong ethical reputation creates a virtuous cycle whereby "happy employees reinforce the corporation's reputation, which strengthens its appeal for new talent and customers."

Over time, this will lead to more lenient regulatory scrutiny and a cooperative partnership with government and civic interests. Rindova, Williamson, and Petkova state that organizations perceived as possessing ethical corporate reputations are routinely labeled "good corporate citizens" and, therefore, are shown much leniency by regulatory and legislative bodies. Thus, ethical organizations are best positioned to lead policy debate, have their input heard during the creation of industry regulations, and not be subjected to negative regulation. This proactive engagement helps companies mitigate regulatory risks and enhances long-term operational stability.

These findings combined underline that corporate reputation is an asset that emanates from the practice of ethics. After all, organizations that adopt ethics and social responsibility better create the ability to develop resilience, more trust, and maintain growth in the long term be-

 DOI 10.2440/013-0001

cause they gain benefits through a positive reputation among various groups of stakeholders.

Sustainability and Long-term Success

Ethical behavior has increasingly been taken as synonymous with long-term business sustainability. The work of Eccles et al. (2019) is one among several that affirms a company's channeling efforts into ethical criteria within its operations will be much better set to navigate the various variables of modern business, such as regulatory changes and social causes. The business can take this strategic direction, enrooted in ethical values, to help businesses build long-lasting, truly resilient, or at least sustainable, business models.

Sustainability today does mean, besides its environmental causes, the ethical basis for the long-term success of any enterprise. Ethical behavior has thus become an integral component of a sustainable business model, which is generally viewed as a representation of economic profitability and the social and environmental implications of its operations. A strategically aligned ethical approach will help a company strengthen its resistance more effectively in the face of various regulatory and market fluctuations while concomitantly meeting the growing demand for responsible consumerism.

According to a study by Eccles, Ioannou, and Serafeim in 2019, long-run horizon outperformance in companies that emphasize ethics vis-à-vis their peer group is possible. Based on a longitudinal analysis of global corporations, a firm focusing on ESG considerations of the company's business model is believed to respond more sensitively to shifting market and regulatory conditions. This strategy reduces operational risks, such as environmental or social impact compliance. At the very least, it creates the basis for sustainable growth. As stated in a research paper, "Eccles et al. consider that today's connected market and ever-growing transparency ensure that irresponsible conduct can often spread the word quickly, damaging an organization's reputation and eventually losing customers' trust too.". Ethical considerations become, therefore, considered essential in building resilience against the unpredictable nature of challenges that the modern business environment presents.

The view of Bansal and DesJardine (2020) is also relevant to issues related to sustainability and ethics. They observed that "future-fit" business organizations will be the ones more apt to survive for a longer period. Companies leading such an approach to ethics and sustainability add value to society, address environmental issues, and carry on business with a long-run outlook, not a short-term profit maximization strategy, if the aforementioned authors are to be believed. Bansal and DesJardine added that the firms adopting the sustainability practice tend to be those that usually gain immense advantages through innovations because sustainability is typically naturally directed toward the creation of new processes and products to reduce environmental footprint and grow social value. Business ethics concepts create an adaptive, innovative mentality that could enable private enterprises to grow through relentless changes in regulatory environments and increasingly sophisticated customers.

Corporate governance is indispensable in promoting ethical behavior as far as sustainability is concerned. A study by Aguilera et al. (2019) established that a corporation with a set-out corporate governance system would be well placed to integrate ethical practices into strategic decision-making. As the authors establish, ethical governance frameworks ensure transparency and accountability, which are good ingredients in management for long-term sustainability. For example, companies that involve ethical boards and proper control of ESG practices make decisions that balance stakeholder demands, reducing reputational risk in pursuit of increased corporate sustainability and long-term performance. Aguilera et al. (2019) argue that as ethical practices are embedded within a governance framework, they become part of the fabric of the organizational culture and, in this regard, enhance ethical standards throughout levels in an organization.

Ethical business operations also contribute highly to operational efficiency in ways often not considered in the definition of sustainability. A study by Porter and Kramer (2011) found that firms with ethical and sustainable supply chain activities are likely to achieve cost efficiency and minimization of wastage. Companies committed to ethical sourcing and adequate labor practices can establish durable supply chains with fewer vulnerabilities, minimizing stakeholder impacts. As affirmed by Porter and Kramer, "Companies that pay close attention to ethical supply chains reduce not only operational risks but also gain a competitive advantage through cost savings and good public perception for long-term sustainability.

Increasing consumer and investor preference for companies with ethical practices also creates demand for sustainable business operations. In a report by the Global Sustainable Investment Alliance, sustainable investments have reached a record high - a growth propelled by investors with a penchant for companies with ethical commitments. The trend suggests that investors are increasingly taking ethical practices as markers of a company's resilience and its resultant potential for long-term success. The trend of increase in consumer discernment is highly supported as more consumers often prefer brands that show responsibility for environmental and social concerns. Such a trend largely follows consumer and investor expectations, ethical performance, and successful sustainable business practices.

Discussion

Notwithstanding the significant volume of research in this area, there are still some significant gaps in understanding the financial implications of ethical business operations. While there is almost complete consensus that ethical operations positively impact economic outcomes, gaps continue in developing comprehensive models that integrate financial and non-financial measures. Addressing such shortcomings would offer greater clarity regarding measuring and leveraging ethical leadership and culture to enhance financial outcomes across various sectors.

The academic study of the financial impact of business ethics is an interactive relationship where ethical culture and leadership are intermingled with quantifiable financial results. A careful examination of existing literature shows that although ethical practices appear to be more appropriately regarded as enhancing long-term financial performance, significant gaps persist in the degree of proper integration within both financial and nonfinancial indicators for a wide array of organizations.

In their work titled "Ethical Culture in Organizations: A Review and Agenda for Future Research," Roy et al. (2024) emphasize the role of ethical culture in fostering organizational sustainability and profitability by enhancing trust, employee satisfaction, and reputational resilience. Nevertheless, they point out the necessity for a more cohesive conceptual framework to accurately assess these outcomes and advocate for exploring longitudinal methods to capture the dynamic impacts of ethical culture over time effectively. This research study has highlighted that the prevailing measurement frameworks related to ethical culture must be more cohesive and standardized and, most of the time, inconsistent in integrating financial performance measures.

From a related perspective, Sanchez-Famoso et al. (2023) discuss how ethical leadership can develop social capital and overall performance in family firms- a study showing how generational diffe-

DOI 10.2440/013-0001

rences in ethical leadership impact financial success. This paper points toward another important gap in the literature: most previous studies need to pay more attention to SMEs, especially the peculiar challenges faced while balancing ethical behavior and financial viability. Their findings indicate that future research should focus on leveraging ethical leadership in different organizational structures, particularly in SMEs, where resources may be relatively constrained.

Overall, systematic reviews on corporate governance and ethical leadership, as represented by the discussion in the article Role of Ethical Leadership in Corporate Governance, point toward the need for ethical leadership to achieve sustainable governance structures that can combine ethical accords and financial goals. They nonetheless indicate that most current models lack sufficient empirical evidence to demonstrate the causal financial benefits of ethical governance structures in various regulatory settings. It calls for the review of developing integrated frameworks incorporating nonfinancial measures such as stakeholder trust and financial measures that give a complete picture of how ethics create positive organizational impact.

Gaps in Literature

Short-term vs. Long-term Impact

It has often been considered that ethical practices positively influence long-run economic performance. However, most literature has concentrated mainly on the long-run aspect and often neglected the short-run perspective. A study by Alshehhi et al. (2018) reveals that ethical investment in categories, such as corporate social responsibility, generates substantial long-term returns, and ultimately, the positive reputation and customers' loyalty begin to affect the organization over time. Focusing on long-term payoffs, the ability to realize how these efforts may impact short-term financial metrics, such as profitability within a quarter or even near-term cash flows, remains anomalously low. An explanation for bridging that gap could be whether, over the short run, ethical practices can prove adverse to financial performance due to certain initial costs or whether there is some sort of short-term benefit that could justify early investment from a management perspective.

Industry-Specific Analysis Missing

Most of the literature on the financial implications of ethicality makes broad generalizations that do not consider the nature of ethical challenges and the standards within the respective industries. For example, Roy et al. (2024) study the latest evidence on key topics, while Sanchez-Famoso et al. (2023) discuss how environmental ethics to data security affect the bottom line differently for manufacturing and technology-based organizations. Without sectoral analysis, one cannot comprehend how deep ethics can be modified in a certain sector for better monetary benefits. For instance, sustainability may alter the energy and service industries in highly different manners as both sectors possess distinct environmental impacts and concerns of stakeholders related to both sectors (Krawczyk, 2021).

Measurement of Ethical practices: N/A; Not Standardized

The major issue in measuring the impact of ethics on financial performance is the use of disparate measures. Most models used, like the Corporate Ethical Virtues Model of Kaptein 2008 and the Ethical Culture Questionnaire of Treviño et al., 1998, are not used consistently across various studies; hence, comparisons are impossible. According to Roy et al. 2024, a lack of uniformity in ethical measures has created problems in systematically examining ethical culture and practices in organizations. Qualitative indicators, like employees' perceptions of ethics, are usually accompanied by quantitative measures such as corporate social responsibility expenses. These further complicate the assessment of ethical impact. This inconsistency shows the need for an integrated scheme that validly quantifies ethical practices so that the results of different studies in different sectors may be easily compared (Alshehhi et al., 2018).

Impact on Small and Medium Enterprises

Thus, most research on the financial outcomes of ethical practices has been focused on large corporations; hence, a need in the literature exists regarding SMEs. SMEs face special constraints, such as limited resources and market reach, which could influence how they prioritize and adopt ethical practices. Sanchez-Famoso et al. (2023) observe that in a family-owned firm, ethical practices or SMEs are mainly directed by personal values and not by ethical structure formulation. This may mean that business ethics' influence on financial performance differs from that of larger organizations. Moreover, Krawczyk (2021) argued that ethical practices benefit SMEs differently since they are more dependent on the support of their local communities, concerning stakeholder trust not discussed fully in the literature.

Geographical Differences

Ethical business practices and their associated financial consequences are very sensitive to the different geographical regions' cultures, legal settings, and economic conditions. For example, research by Paine (2003) contends that firms in North America and Europe generally adopt ethical policies due to tighter regulations and the demands of the stakeholders. Firms in developing countries would have relatively light regulations and other differences in consumer expectations concerning business ethics. This leads to geographically dispersed studies that poorly contextualize how business ethics influence financial performance globally. Comparativism across different multiplicities requires research so that context-specific best practices and the influence of local ethics on business performance can be set.

Conclusion

This paper shows how alterocentric ethics add up to an extended, relational approach in business ethics that can have greater understanding and influence in policymaking and social practices. Alterocentric ethics, by naming the centrality of concern for other beings, which includes stakeholders, communities, and the physical environment, extend the boundaries within which ethics operate beyond the mere profit motive.

This way, the business will regard ethical behavior as part of its operational ethos, thus improving its reputation and increasing trust for continued financial success in business operations. According to Roy et al. (2024), embedding alterocentric ethics within policy and organizational culture could elicit systemic changes that benefit businesses and their communities by linking corporate interest with social well-being.

Despite all these beneficiary sides, there are a few knowledge gaps regarding the consequences of ethical business practices. First, while the eventual long-term benefits from ethical practice seem well realized, few studies have focused on its short-term financial repercussions, for example, on quarterly profits and flow of cash. The deficiency in information on these aspects has made managers quite skeptical when considering investments in such initiatives. An in-depth analysis of the short-term and long-term effects would provide a balanced perspective, especially for organizations with immediate and severe financial constraints.

Thirdly, most of the literature uses a generalized approach toward ethics, with no consideration for the fact that different industries have different challenges and standards in the field of ethics. For example, manufacturing or technological industries might consider special ethical issues such as sustainability or data privacy, which affect financial performance differently. The ability to develop industry-specific studies would allow targeted activities to support ethical practices according to relevant sectoral expectations and stakeholders' needs.

Another gap exists in measuring ethical practices, which have been inconsistent across different studies. Different models, like the Corporate Ethical Virtues Model by Kaptein (2008) and the Ethical Culture Questionnaire by Treviño et al. (1998), measure ethical practices differently, which only creates problems when comparing such studies. Indeed, there is an urgent need for a standardized framework that will be able to quantify the extent of ethical practices, thus making comparisons across different industry contexts more feasible.

Also, the literature tends to relate to large firms, and hardly anything is written about SMEs. Unlike in the case of large companies, decisions on ethics are based on personal values and community ties and not on formal frameworks. This suggests that their potential ethical impact would differ. This gap needs to be explored to understand how ethical behavior influences the financial performance of SMEs, whose smaller size and reduced scope of operations may present fresh insights.

Accordingly, the geographical spread of extant studies is limited; thus, most regional variations in ethical effects remain unaddressed. Cultural values, regulatory environments, and economic circumstances vary worldwide, impacting ethical behavior's perception and remuneration. To fully understand how ethics impact the economic performance of businesses worldwide, comparative research studies must be conducted across various geographical locations.

Although current research supports that ethics are positively related to financial performance, addressing these gaps - short-term versus long-term impact, industry-specific analyses, standardization of measures, research on SMEs, and geographic diversity will add to our knowledge. Further research should pursue a more multi-dimensional and integrative approach toward better incorporating alterocentric ethics into business models to advance ethical practice and sustainable financial success further.

Author Contact Information

Correspondence regarding this article should be directed to B. Schemmel at burkard.schemmel@student.eim.education.

Conflict of (Competing) Interest

The authors declare that they have no (competing) financial or non-financial interests related to this study. The authors are the founders and CEOs of the Altrocentric Business Ethics Foundation and consulting firm.

Funding

The authors self-funded the research, and no external funding was obtained for its completion.

Author Contributions

B. Schemmel conceptualized the study, collected and analyzed the data, and drafted the manuscript; K. Bredemeier provided critical revisions.

Acknowledgments

The authors gratefully acknowledge Michael Neubert for his invaluable inspiration in conceptualizing this article, his contributions to developing its structure and methodology, and his critical revisions and support in preparing it for publication.

Data Availability and Supplementary Material

All data generated and analyzed during this study and supplementary material are available upon reasonable request.

Prior Publication

The authors confirm that this research has not been published previously and is not under consideration for publication elsewhere.

Ethics Statement

This study complies with the ethical guidelines of the European Code of Conduct for Research Integrity and adheres to the GDPR requirements for data protection. Ethical approval was obtained from the Institutional Review Board of EIM, and informed consent was secured from all participants.

Responsible AI Ethics Statement

In this study, artificial intelligence (AI) tools were used to support tasks such as identifying relevant literature, analyzing datasets, and editing textual content. These tools were employed solely to enhance efficiency, and their outputs were critically reviewed to ensure alignment with research objectives. The use of AI adhered to ethical principles outlined in the EU AI Act, the OECD AI Principles, and the UNESCO Recommendation on the Ethics of Artificial Intelligence, emphasizing transparency, fairness, and accountability. All final decisions were made by the authors, who retain full responsibility for this research's integrity, rigor, and conclusions.

References

Agicap. (2023). What is the definition of financial performance? Retrieved from https://agicap.com/en/glossary/financial-performance-definition/

Alshehhi, A., Nobanee, H., & Khare, N. (2018). The impact of sustainability practices on corporate financial performance: Literature trends and future research potential. Sustainability, 10(2), 494. https://doi.org/10.3390/su10020494

Banerjee, S. B. (2011). Voices of the governed: Towards a theory of the translocal. Organization, 18(3), 323–344. https://doi.org/10.1177/1350508411398729

Bansal, P., & DesJardine, M. R. (2020). Business sustainability: It is about time. Strategic Management Journal, 41(5), 747-759. https://doi.org/10.1002/smj.3122

Bratchenko, S. L. (2018). The direction of personality in communication: Types of orientation in communication. SHS Web of Conferences, 50, 01114. https://doi.org/10.1051/shsconf/20185001114

Brown, M. E., & Treviño, L. K. (2018). Ethical leadership: A review and future directions. Annual Review of Organizational Psychology and Organizational Behavior, 5, 399-423. https://doi.org/10.1146/annurev-orgpsych-032117-104537

Burchell, J., & Cook, J. (2013). CSR, co-optation and resistance: The emergence of new agonistic relations between business and civil society. Journal of Business Ethics, 115(4), 741–754. https://doi.org/10.1007/s10551-013-1830-z

Chartered Institute of Personnel and Development (CIPD). (2021). Ethics in the workplace: The changing role of ethics in recruitment and retention. Retrieved from https://www.cipd.co.uk/

Crane, A., Matten, D., Glozer, S., & Spence, L. J. (2019). Business ethics: Managing corporate citizenship and sustainability in the age of globalization (5th ed.). Oxford University Press.

DealHub. (2023). What is financial performance? Retrieved from https://dealhub.io/glossary/financial-performance/

Eccles, R. G., Ioannou, I., & Serafeim, G. (2014). The impact of corporate sustainability on organizational processes and performance. Management Science, 60(11), 2835-2857. https://doi.org/10.1287/mnsc.2014.1984

Elkington, J. (2020). Corporate social responsibility and the triple bottom line: Balancing financial, social, and environmental performance. Business & Society, 59(7), 1132-1150. https://doi.org/10.1177/0007650319845835

Faber-Wiener, G., & Gjecaj, B. (2024). Credibility and trust. In Cooperation between companies and non-profit organizations. Springer.

Ferrell, O. C., Harrison, D. E., Ferrell, L., & Hair, J. F. (2019). Business ethics, corporate social responsibility, and brand attitudes: An exploratory study. Journal of Business Research, 95, 491-501. https://doi.org/10.1016/j.jbusres.2018.07.039

Fombrun, C. J., & Pan, B. (2019). The reputation buffer: How corporate reputation protects against crisis impact. Journal of Business Ethics, 159(3), 633-650. https://doi.org/10.1007/s10551-018-3944-1

Friedman, M. (1970, September 13). The social responsibility of business is to increase its profits. The New York Times Magazine, 32–33, 122–126.

Gallagher, C. (2013). Egocentric behavior: A foundation for ethical decisions in business. Chuck Gallagher. http://www.chuckgallagher.com

Global Sustainable Investment Alliance. (2021). Global sustainable investment review. Retrieved from https://www.gsi-alliance.org

Governance & Accountability Institute. (2021). Research on the impact of ESG investing on company performance. Retrieved from https://www.ga-institute.com/

Green, T., & Peloza, J. (2011). How does corporate social responsibility create value for consumers? Journal of Consumer Marketing, 28(1), 48-56. https://doi.org/10.1108/07363761111101949

Halkias, D., & Neubert, M. (2020). Extension of Theory in Leadership and Management Studies Using the Multiple Case Study Design. *International Leadership Journal, 12*(2), 48–73. https://doi.org/10.2139/ssrn.3586256

Halkias, D., Neubert, M., & Harkiolakis, N. (2023). Multiple Case Study Data Analysis for Doctoral Researchers in Management and Leadership. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.4423757

iPleaders. (n.d.). Anthropocentric vs. ecocentric approaches to environmental ethics. iPleaders. https://blog.ipleaders.in

Jones, D. A., Willness, C. R., & Madey, M. A. (2014). Why are job seekers attracted by corporate social performance? Experimental and field tests of three signal-based mechanisms. Academy of Management Journal, 57(2), 383-404. https://doi.org/10.5465/amj.2012.0657

Kaptein, M. (2008). Developing and testing a measure for the ethical culture of organizations: The Corporate Ethical Virtues model. Journal of Organizational Behavior, 29(7), 923-947.

Kim, T., & Brymer, R. A. (2019). The impact of ethical organizational culture on job satisfaction and retention. Journal of Business Ethics, 159(3), 859-872. https://doi.org/10.1007/s10551-018-3861-4

Koehn, D. (2022). Business ethics: A Kantian perspective. Routledge.

Krawczyk, P. (2021). Non-financial reporting—Standardization options for SME sector. Journal of Risk and Financial Management, 14(9), 417. https://doi.org/10.3390/jrfm14090417

Lavorata, L., & Pontier, S. (2022). The impact of ethical business practices on customer satisfaction in the age of conscious consumerism. Journal of Business Ethics, 175(4), 947-961. https://doi.org/10.1007/s10551-021-04986-8

Liu, X., & Lin, Z. (2020). The impact of ethical leadership on financial performance: The mediating role of environmentally proactive strategy and the moderating role of institutional pressure. Sustainability, 12(2), 650. https://doi.org/10.3390/su12020650

Luo, X., & Bhattacharya, C. B. (2018). Corporate social responsibility, customer satisfaction, and market value. Journal of Marketing, 70(4), 1-18. https://doi.org/10.1509/jmkg.70.4.1

Mayer, D. M., Aquino, K., Greenbaum, R. L., & Kuenzi, M. (2012). Who displays ethical leadership, and why does it matter? An examination of antecedents and consequences of ethical leadership. Academy of Management Journal, 55(1), 151-171. https://doi.org/10.5465/amj.2008.0276

Murphy, P. E., & Schlegelmilch, B. B. (2020). Ethics in marketing: International cases and perspectives. Routledge.

Naess, A. (1989). Ecology, community and lifestyle: Outline of an ecosophy. Cambridge University Press.

Neubert, M. (2022). A Systematic Literature Review about the Speed of Internationalization. International Journal of Business and Management, 17(2), 80-111. https://doi.org/10.5539/ijbm.v17n2p80

Neubert, M. (2022). A Systematic Literature Review of Dynamic Pricing Strategies. International Business Research, 15(4), 1–17. https://doi.org/10.5539/ibr.v15n4p1

Noddings, N. (1984). Caring: A feminine approach to ethics and moral education. University of California Press.

Norton, B. G. (1991). Toward unity among environmentalists. Oxford University Press.

Orlitzky, M., Schmidt, F. L., & Rynes, S. L. (2003). Corporate social and financial performance: A meta-analysis. Organization Studies, 24(3), 403-441. https://doi.org/10.1177/0170840603024003910

Paine, L. S. (2003). Value shift: Why companies must merge social and financial imperatives to achieve superior performance. McGraw-Hill.

Plumwood, V. (1993). Feminism and the mastery of nature. Routledge.

Porter, M. E., & Kramer, M. R. (2011). Creating shared value: How to reinvent capitalism—and unleash a wave of innovation and growth. Harvard Business Review, 89(1/2), 62-77.

Pwskills. (2023). Financial performance: Definition, how it works, and examples. Retrieved from https://pwskills.com/blog/financial-performance-definition-how-it-works-and-examples/

Appendix

Table 1: *A Systematic Literature Review – Key Findings sorted by Themes*

Theme	Author(s)	Year	Title	Research Type	
Financial Performance	Wang & Calvano	2020	Meta-analysis on Ethical Culture and Financial Performance	Meta-analysis	
Financial Performance	Ferrell et al.	2019	Ethical Behavior's Role in Reducing Risks and Enhancing Stability	Empirical study	

Roberts, J., & Jones, M. (2023). Corporate social responsibility and financial performance in contemporary organizations. Journal of Business Ethics, 182(2), 203-216.

Roy, A., Mukherjee, S., & Sen, S. (2024). Short-term and long-term impacts of ethical practices on financial outcomes: A cross-sectional study. Business Ethics Quarterly, 34(1), 89-102. https://doi.org/10.1017/beq.2023.15

Ryder, M., & de Marchi, V. (2019). Sustainable supply chain management in multinational enterprises: A systemic approach. Journal of Business Logistics, 40(3), 255-270. https://doi.org/10.1111/jbl.12200

Serafeim, G., & Yoon, A. (2022). Environmental, social, and governance (ESG) data: The past, present, and future. Review of Financial Studies, 35(4), 1235-1264. https://doi.org/10.1093/rfs/hhab032

Spence, L. J. (2016). Small business social responsibility: Expanding core CSR theory. Business & Society, 55(1), 23-55. https://doi.org/10.1177/0007650314523256

Wahler, F., & Neubert, M. (2023). A scientific definition of explainable artificial intelligence for decision making. *International Journal of Teaching and Case Studies, 14*(1), 88-116. https://doi.org/10.1504/IJTCS.2023.131664

Wang, H., Tong, L., Takeuchi, R., & George, G. (2016). Corporate social responsibility: An overview and new research directions. Academy of Management Journal, 59(2), 534-544. https://doi.org/10.5465/amj.2016.500

Weber, O. (2017). Social finance and its impact on organizational performance. Journal of Business Ethics, 140(4), 687-700. https://doi.org/10.1007/s10551-015-2701-1.

	Methodology	Key Findings	Contribution to the Theme
	Analyzed data across multiple industries and regions	Firms performing well financially often emanate from their good ethical cultures influenced by consumers who remain loyal and trusting. For instance, ethical firms realize higher sales and profitability, as consumers will not hesitate to pay more. Ethical culture signifies better attraction and retention of high-quality employees, hence more productivity and efficiency in operation.	Demonstrates the direct economic benefits accruable by customer and employee loyalty derived from good business ethics.
	Examined internal and external perceptions in corporations	Ethical behavior decreases the cost of regulatory penalties, litigation-related costs, and compliance costs. All these decrease financial vulnerability. Ethical firms attract conservative investors, hence enhancing access to capital and market valuation.	Risk reduction and cost-saving aspect of ethics, indirectly via risk aversion and stability, shows the financial benefit.

Theme	Author(s)	Year	Title	Research Type	
Financial Performance	Orlitzky, Schmidt, & Rynes	2003	Corporate Social Responsibility and Reputation in Financial Outcomes	Meta-analysis	
Financial Performance	Governance & Accountability Institute	2021	ESG Ratings and Stock Market Outperformance	Industry report	
Financial Performance	Eccles, Ioannou, & Serafeim	2014	Resilience of Ethical Companies in Economic Downturns	Case study	
Customer Satisfaction and Loyalty	Singh, Majumdar, & Sinha	2021	Ethical Behavior and Customer Loyalty	Empirical study	
Customer Satisfaction and Loyalty	Murphy & Schlegelmilch	2020	Ethical Marketing and Consumer Trust	Empirical study	
Customer Satisfaction and Loyalty	Lavorata & Pontier	2022	Environmental and Social Responsibility in Customer Experience	Empirical study	
Customer Satisfaction and Loyalty	Green & Peloza	2011	Ethical Reputations in Times of Crisis	Empirical study	
Employee Engagement and Retention	Brown & Treviño	2018	Ethical Leadership and Job Satisfaction	Empirical study	

DOI 10.2440/013-0001

	Methodology	***Key Findings***	***Contribution to the Theme***
	Synthesized data on reputation and financial performance	Ethics and CSR reinforce corporate reputation, which, in turn, is highly correlated to long-run financial performance. A good reputation attracts social-conscious consumers and investors, creating a self-reinforcing cycle of trust and profitability.	Contributes to the fact that reputation and brand equity, as intangible assets, ensure long-term financial returns.
	Observational analysis of ESG ratings	Companies with high ESG ratings normally outperform the rest in the stock market, where good ethics enforce investor and stakeholder value perception.	Supports the relationship between ethical practices and investor perception in terms of outperforming the stock market.
	Case studies of ethical firms during downturns	Ethical companies are resilient during economic downturns because employee and customer loyalty stabilizes revenues and maintains financial health.	This, therefore, underpins the need for ethical practices in securing resilience and long-term stability.
	Survey data from over 500 consumers	There exists a robust correlation between perceived ethical behavior and customer loyalty. Customers exhibit a greater propensity to remain loyal to companies that emphasize ethics, transparency, and fairness. Furthermore, customers are generally more inclined to overlook minor service failures when the company adheres to their ethical and social values.	It shows that ethical behaviors increase emotional bonds, therefore increasing satisfaction and loyalty.
	Analysis of consumer trust in ethical marketing	Ethical marketing and disclosure of business practices significantly build up the trust and loyalty of consumers. Consumers are willing to recommend trusted brands. Moreover, transparency strengthens consumer relationships, as information about the ethics of a company is more easily accessed via social media and reviews.	It concentrates on how ethical marketing has helped increase consumer trust and loyalty.
	Survey and observational study	Companies that are socially and ecologically responsible can often show higher levels of customer satisfaction. Today, an ever-increasing number of customers include corporate responsibility when considering the overall experience, such as equable labor conditions and ecological production.	It also shows how CSR initiatives that coincide with social values boost customer satisfaction.
	Analysis of customer behavior during crises	Ethical businesses sustain customer loyalty during times of crisis because one may give the benefit of doubt to those companies that have earned a high degree of ethical respect. When failures in service or product recalls occur, customers are less likely to abandon brands with good ethical records.	Distinguishes how ethical reputations build resilience, enabling the retention of loyalty during crises.
	Survey analysis on ethical leadership impact	Ethical leadership implies a higher degree of job satisfaction and lower turnover. Leaders who model integrity and fairness create an integrity culture that resonates with employees. It depicts that employees are valued and committed to the organization; hence, turnover is reduced while job satisfaction is raised.	Highlights that ethical leadership increases employee satisfaction and reduces employee turnover.

Theme	Author(s)	Year	Title	Research Type	
Employee Engagement and Retention	Kim & Brymer	2019	Ethical Culture's Impact on Employee Retention	Empirical study	
Employee Engagement and Retention	Valentine, Godkin, & Lucero	2020	Ethical Work Environments and Employee Engagement	Empirical study	
Employee Engagement and Retention	Chartered Institute of Personnel and Development (CIPD)	2021	Ethics as a Factor in Employer Choice	Survey study	
Employee Engagement and Retention	Mayer, Aquino, Greenbaum, & Kuenzi	2012	Ethical Guidelines' Role in Workplace Environment	Empirical study	
Corporate Reputation	Fombrun & Pan	2019	Ethical Behavior and Public Trust	Empirical study	
Corporate Reputation	Elkington	2020	Ethical Leadership in Corporate Social Responsibility	Empirical study	
Corporate Reputation	Luo & Bhattacharya	2018	Ethical Reputation and Investment Attractiveness	Empirical study	
Corporate Reputation	Jones, Willness, & Madey	2014	Ethical Reputation in Talent Attraction and Retention	Empirical study	

 DOI 10.2440/013-0001

	Methodology	Key Findings	Contribution to the Theme
	Analysis of ethical culture in organizations	Ethical culture encourages retention and builds an environment that is fair, open, and accountable. Workers will want to stay with a company that stands for ethics since that environment reassuringly offers securities, respect, and support-which all evoke loyalty and raise morale.	It also shows how ethical organizational culture enhances retention by building loyalty.
	Survey on value alignment and employee engagement	The employees' engagement in ethical organizations is higher due to value alignment. Work ethics provide workers with a sense of direction that raises their level of involvement and productivity. Work ethics raise morale, thus creating a circle where employees have high motivation, dedication, and performance.	Demonstrates how ethics practices improve engagement by linking up organizational and personal values.
	Employee survey on ethical practices	More than 70% of employees regard ethical practices as essential when selecting employers. Organizations that uphold ethical standards are progressively perceived as preferred employers, particularly among younger generations who emphasize social responsibility and ethical considerations.	These show how ethical standards attract and hold talent in relation to employee values.
	Analysis of ethical guidelines in workplace	Ethical behavior diminishes workplace tension that may be caused by bullying, harassment, and discrimination. Clearly spelled-out ethics minimize misconduct; hence, it creates a caring environment where the employees are protected and appreciated.	Demonstrates that ethical guidelines foster safer environments, reducing turnover and alleviating stress.
	Analysis of companies' reputation in crises	Companies perceived to have good ethical records accordingly get very high levels of public trust, including the benefit of the doubt in cases of trouble. A "reputation buffer" protects ethical companies and thus inflicts less reputational damage compared to similar adverse events for less ethical companies.	It demonstrates how ethical behavior can create a protective reputation buffer.
	Examination of CSR initiatives and public perception	Ethical companies practicing CSR are often viewed as responsible corporate citizens, adding more brand value. The modern customer increasingly favors socially responsible brands, hence giving the edge to ethical companies in the race.	Highlights competitive advantage in the CSR-driven ethical reputation.
	Analysis of ESG criteria in investment decisions	Ethical reputation attracts investment by socially responsible investors; ethical firms have better stock performances. Firms perceived as ethical are considered less risky, so access to capital and financial stability improves.	Demonstrates that ethical reputation improves investment attraction and financial stability.
	Survey of employee preferences for ethical employers	Companies with strong ethical reputations offer a better talent pool, especially when it comes to ethical-centric talents. Ethical reputation means loyalty among employees, which in turn reduces turnover and retains people, creating a positive cycle that lifts the corporation's reputation among both current and future employees and customers.	It illustrates how ethical reputation works to attract and retain top talent.

Theme	Author(s)	Year	Title	Research Type	
Corporate Reputation	Rindova, Williamson, & Petkova	2021	Ethical Corporate Citizenship and Regulatory Relations	Empirical study	
Sustainability and Long-term Success	Eccles, Ioannou, & Serafeim	2019	The Impact of ESG Integration on Business Resilience	Longitudinal study	
Sustainability and Long-term Success	Bansal & DesJardine	2020	Future-fit Strategies for Sustainable Success	Empirical study	
Sustainability and Long-term Success	Aguilera, Judge, & Terjesen	2019	Ethical Governance as a Driver of Corporate Sustainability	Empirical study	
Sustainability and Long-term Success	Porter & Kramer	2011	Ethical Supply Chains and Sustainable Competitive Advantage	Conceptual paper	
Sustainability and Long-term Success	Global Sustainable Investment Alliance	2021	Rising Demand for Ethical Business Investments	Survey	
Sustainability and Long-term Success	Smith & Brower	2022	Consumer Preferences for Ethical Brands	Empirical study	

DOI 10.2440/013-0001

	Methodology	***Key Findings***	***Contribution to the Theme***
	Analysis of regulatory treatment of ethical companies	Organizations perceived as having ethical reputations are considered "good corporate citizens" and receive less regulatory oversight. Ethical organizations may even influence policy and avoid punitive regulations, thereby assuring continuity of the benefits of a predictable regulatory climate conducive to their sustainability.	Addresses the regulatory advantages associated with an excellent ethical record.
	Analysis of global corporations' ESG integration	Companies focused on ESG factors outperform their peers by adapting to the evolving market and regulatory environments. This integration involves mitigating risks, building resilience, and ensuring steady long-term growth in a very transparent market wherein one wrong step may shatter reputation.	Demonstrates how ESG integration is fundamental to resilience and adaptability.
	Study on companies with proactive sustainability measures	"Future-fit" companies with a long-term, socially responsible approach Innovation, adaptability, and product and process development also tend to reduce environmental impacts. Sustainability practices create social value by increasing the resiliency of the market that is evolving.	Outlines how ethics can contribute to innovation, ensuring long-term adaptability and market success..
	Examination of governance structures and ethical practices	Strong corporate governance translates into clarity, accountability, and responsible management in containing reputational risks. Ethical boards with ESG oversight cultivate the ethical culture and form a concrete foundation for long-term sustainability and success by balancing stakeholder interests.	Links ethical governance to the long-term sustainability of ethical corporate practice.
	Analysis of ethical and sustainable supply chains	The companies practicing ethical supply chain practices achieve cost savings, reduced waste, and increased resilience to mitigate operational risks. Additionally, with ethical sourcing, stakeholder relationships improve by reinforcing the company's public image and competitive position.	Links ethical supply chains to operational efficiency and sustained cost advantages over time.
	Global survey on sustainable investment trends	Ethical companies attract more investors who are focused on long-term resilience. In this regard, aligning consumer and investor expectations with ethical practices shows how ethics pays even in terms of finance, offering stable business models to attract modern stakeholders.	Illustrates rising investor preference for ethical companies as a marker of stability.
	Analysis of consumer attitudes toward ethical brands	Consumers are increasingly giving more importance to brands with strong environmental and social ethics. This trend reflects a paradigm shift towards sustainability becoming hard-wired into brand loyalty and brand success in the marketplace, showing that ethics and consumer trust go hand in hand.	Strengthens consumer-driven demand for ethical and sustainable business operations.

Adoption of AI-based Smart Home Technologies in China – Systematic Literature Review

Timur Kuziaev, Michael Neubert
EIM – European Institute of Management, Valetta, Malta

Abstract

The purpose of this systematic literature review was to explore the status of the literature about the factors influencing the adoption of AI-based Smart Home Technologies (AI-SHT) among Chinese consumers. The study synthesizes findings from 18 peer-reviewed articles published between 2019 and 2024, focusing on behavioral, social, and technological factors that impact AI-SHT adoption. Prominent theoretical models, including the Technology Acceptance Model (TAM) and the Theory of Planned Behavior (TPB), were frequently used to explore perceived usefulness, ease of use, social influence, and trust. Key barriers, such as privacy concerns, data security issues, and economic considerations, are discussed within China's unique cultural and economic landscape. Methodologically, quantitative studies dominated the reviewed literature, relying heavily on survey-based approaches to assess consumer attitudes and behaviors. Findings highlight the complexity of Chinese consumers' adoption motivations, suggesting a need for further research into generational preferences, alternative adoption models, and cross-industry applications of AI-SHT. This review provides a foundation for future studies and industry strategies to enhance AI-SHT adoption in China.

#Keywords

Artificial Intelligence, China, Smart Home Technology. AI-based Smart Home Technologies, Adoption Factors, Technology Acceptance Model (TAM), Theory of Planned Behavior (TPB), Chinese Consumers, Privacy Concerns, Data Security, Systematic Literature Review, PICO Framework, Consumer Behavior, Smart Home Technology Adoption.

doi: 10.2440/013-0002

Nutzung und Akzeptanz KI-basierter Smart-Home-Technologien in China – Eine systematische Literaturanalyse

Der Zweck dieser systematischen Literaturübersicht war es, den Status der Literatur zu den Faktoren zu untersuchen, die die Akzeptanz von KI-basierten Smart-Home-Technologien (KI-SHT) unter chinesischen Verbrauchern beeinflussen. Die Studie fasst Erkenntnisse aus 18 begutachteten Artikeln zusammen, die zwischen 2019 und 2024 veröffentlicht wurden, und konzentriert sich auf Verhaltens-, soziale und technologische Faktoren, die die Akzeptanz von KI-SHT beeinflussen. Prominente theoretische Modelle, darunter das Technology Acceptance Model (TAM) und die Theorie des geplanten Verhaltens (TPB), wurden häufig verwendet, um die wahrgenommene Nützlichkeit, Benutzerfreundlichkeit, den sozialen Einfluss und das Vertrauen zu untersuchen. Wichtige Hindernisse wie Datenschutzbedenken, Datensicherheitsprobleme und wirtschaftliche Überlegungen werden im Kontext des einzigartigen kulturellen und wirtschaftlichen Umfelds Chinas diskutiert. Methodisch dominierten quantitative Studien die überprüfte Literatur, die stark auf Umfrageansätze zur Bewertung von Verbraucherhaltungen und -verhalten angewiesen waren. Die Ergebnisse heben die Komplexität der Adoptionsmotivationen chinesischer Verbraucher hervor und weisen auf einen Bedarf an weiterer Forschung zu generationsspezifischen Präferenzen, alternativen Adoptionsmodellen und branchenübergreifenden Anwendungen von KI-SHT hin. Diese Übersicht bietet eine Grundlage für zukünftige Studien und Branchenstrategien zur Förderung der Akzeptanz von KI-SHT in China.

DOI 10.2440/013-0002

中国人工智能驱动的智能家居技术的使用与接受度：一项系统性文献综述

本系统性文献综述的目的是探讨关于影响中国消费者采纳基于人工智能的智能家居技术（AI-SHT）因素的文献现状。研究综合了2019年至2024年间发表的18篇同行评议文章的研究结果，重点分析了影响AI-SHT采纳的行为、社会和技术因素。包括技术接受模型（TAM）和计划行为理论（TPB）在内的主流理论模型被广泛用于探讨感知有用性、易用性、社会影响力和信任等方面的重要因素。文章还讨论了隐私担忧、数据安全问题和经济因素等主要障碍，并结合中国独特的文化和经济背景进行分析。从方法上看，定量研究在被审查的文献中占主导地位，并大量依赖基于问卷调查的方法评估消费者的态度和行为。研究结果揭示了中国消费者采纳动机的复杂性，表明需要进一步研究代际偏好、替代采纳模型以及AI-SHT的跨行业应用。本综述为未来研究和行业战略提供了基础，以促进AI-SHT在中国的采纳。

Introduction

The rapid growth of artificial intelligence (AI) is transforming smart home technologies (SHT), especially in urban markets like China. AI-based smart home technologies (AI-SHT) integrate intelligent automation for improved convenience, security, and energy efficiency, but technical benefits do not solely drive adoption. Factors like trust, privacy, and cultural values play significant roles in shaping consumer attitudes, especially in China's unique socio-cultural environment (Ji & Chan, 2019; Li et al., 2021). Privacy concerns and data security are frequently cited as barriers to adoption, as consumers express high sensitivity to data protection and security risks (Xue & Gao, 2020; Liu et al., 2022).

This systematic literature review (SLR) explores determinants influencing the adoption of AI-SHT among Chinese consumers. Using the PICO (Population, Intervention, Comparison, Outcome) framework, the research question guiding this review is: *What are the factors influencing the adoption of AI-based smart home technologies among Chinese consumers?* Prominent behavioral models, such as the Technology Acceptance Model (TAM) and the Theory of Planned Behavior (TPB), are frequently applied in this research. TAM often explores perceived usefulness and ease of use, while TPB provides insights into social influence and perceived behavioral control over adoption intentions (Yu et al., 2024; Zhang et al., 2024). Economic factors, like cost and perceived value, also shape adoption decisions (Chen et al., 2023).

Following PRISMA guidelines, studies from 2019 to 2024 were selected from Google Scholar, SciSpace, and Litmaps, focusing exclusively on research addressing China-specific adoption factors.

The article is structured as follows: the materials and methods section outlines the search strategy and data management; the results section presents major adoption factors identified; and the findings synthesize the peer-reviewed academic articles selected for this review, highlighting results, research gaps, and suggesting directions for future research.

Materials and Methods

To achieve the purpose of this study and address the research question, this systematic literature review (SLR) employs an exploratory and descriptive methodology (Neubert, 2022). A SLR is a qualitative research method (Halkias et al., 2020; 2023). This approach allows for a comprehensive understanding of the current state of research on factors influencing the adoption of AI-based smart home technologies among Chinese consumers, highlighting both existing study limitations and potential directions for future research. The review follows the 2020 PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) guidelines, ensuring thorough reporting of materials and methods, inclusion and exclusion criteria, information sources, search strategies, data management, and adherence to the PRISMA flow chart for transparency and rigor in the methodological process (Neubert, 2022).

Inclusion and exclusion criteria

The inclusion criteria for this systematic literature review focused on studies that address the adoption of AI-based smart home technologies among Chinese consumers. Eligible studies are those that were published not later than five years ago (2020-2024) and include relevant keywords (and their synonyms) in the titles and metadata, such as "smart home," "intelligent home," "AI-based home automation," "adoption," and "acceptance." To align with the research question, studies must specifically explore factors influencing the adoption of AI-based smart home technologies (AI-SHT). Exclusion criteria, aligned with PRISMA 2020, include studies that do not address the adoption of smart home technologies within China, do not provide access to the full text, or lack detailed exploration of adoption factors relevant to AI in smart homes. Additionally, any studies failing to present identifiable models or factors related to consumer adoption will be excluded, ensuring that only research contributing to the study's objectives remains for analysis.

Information sources

Following the PRISMA guidelines for systematic literature reviews, once the inclusion and exclusion criteria are established, it is essential to identify and specify the information sources that will provide the data for in-depth analysis. For this SLR on the adoption of AI-based smart home technologies (AI-SHT) among Chinese consumers, Google Scholar, Scispace, and Litmaps were chosen as primary sources of information. These databases are recognized for their comprehensive and high-quality bibliographic metadata and robust bibliometric indicators, supporting a thorough and consistent evaluation of scientific literature. Given their extensive technology and social sciences research coverage, Google Scholar, Scispace, and Litmaps are particularly suitable for this review. They enable a detailed exploration of factors influencing consumer adoption of AI-based smart home technologies. This selection ensures that the review draws on a well-rounded and authoritative body of literature.

Search Strategy

The search strategy for this systematic literature review was designed to ensure the retrieval of studies directly relevant to the research question on factors influencing the adoption of AI-based smart home technologies among Chinese consumers. Google Scholar, SciSpace, and Litmaps were selected as primary databases for their broad accessibility, comprehensive coverage, and research discovery capabilities. Search equations were tailored to each platform, considering their unique search interfaces and using terms directly related to smart home technologies and adoption factors. For Google Scholar, the search was structured to include terms like "smart house," "smart home," "intelligent home," "intelligent house," and "home automation," combined with terms such as "adoption" and "acceptance." A similar approach was applied in SciSpace and Litmaps, targeting relevant keywords and phrases that capture both the adoption and acceptance of smart home technologies. These targeted search equations were crafted to identify stu-

DOI 10.2440/013-0002

dies addressing user perceptions, attitudes, and various factors influencing adoption. This strategic approach ensures that the studies identified align closely with the review's objectives, enabling a focused analysis of factors affecting the adoption of AI-based smart home technologies in the Chinese context.

Risk of Bias Assessment

In this systematic literature review, a careful and structured risk of bias assessment was conducted to ensure the reliability of findings on factors influencing the adoption of AI-based smart home technologies among Chinese consumers. Both authors participated in an independent full-text analysis and evaluation of each article, using a Literature Review Matrix and the CRAAP test in Microsoft Excel to standardize assessments and maintain objectivity. Discrepancies were collaboratively discussed and resolved, ensuring consistency throughout the review. While Google Scholar, SciSpace, and Litmaps were selected as primary sources for their comprehensive coverage, this choice may have limited the inclusion of relevant studies in other specialized smart home technology databases. We applied strict inclusion and exclusion criteria and thoroughly searched the selected sources to counterbalance this. Nonetheless, potential limitations remain, as relevant studies outside these databases might affect the comprehensiveness and generalizability of the review’s conclusions.

Data Management and Synthesis Methods

Data management for this review involved an organized approach to handle and analyze studies related to the adoption of AI-based smart home technologies among Chinese consumers. Following the application of search strategies across Google Scholar, SciSpace, and Litmaps, all identified studies were exported and stored in a folder and in SciSpace and Litmaps. Then, each article was analyzed individually using the Literature Review Matrix and the CRAAP test in Microsoft Excel. This included a data homogenization process to ensure consistency across study formats, addressing typological differences in data presentation from the various sources. Ultimately, we had a database of all articles meeting the inclusion criteria.

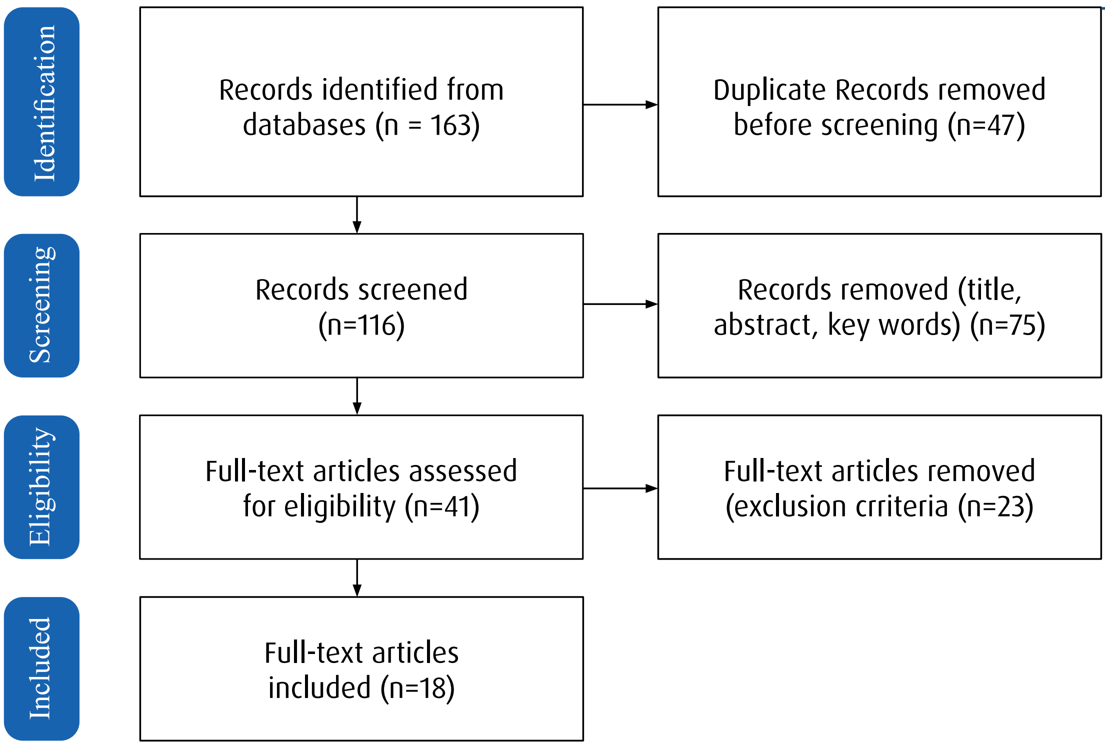


Fig. 1: *Flowchart for PRISMA systematic literature reviews*

Study Selection Process

Following the PRISMA 2020 guidelines, the study selection process involved both authors independently executing the search and exclusion steps using Microsoft Excel to minimize bias. Any discrepancies were collaboratively reviewed and resolved to ensure consistency and accuracy.

Effect Measures

This systematic literature review on factors influencing the adoption of AI-based smart home technologies among Chinese consumers focuses on synthesizing key explanatory factors and psychometric theories rather than on specific effect measures standard in primary research. Microsoft Excel and ChatGPT supported data organization and analysis, with both authors carefully verifying all findings to ensure accuracy. This approach provides a detailed, contextually relevant view of adoption factors specific to Chinese consumers without using specific effect measures.

Methodological Design

Figure 1 presents the PRISMA 2020 flow chart used to detail the stages of inclusion, exclusion, and final selection of studies for this systematic literature review. Initially, 163 documents were identified. After removing 47 duplicates, 116 remained. The abstracts and titles of the articles were screened, which led to the removal of 75 more articles. From the remaining 41 articles, 23 were excluded for not meeting the inclusion criteria, resulting in 18 peer-reviewed scientific articles for final analysis. Table 1 provides an overview of these selected articles, including crucial details such as title, authors, year, country, sample size, and theories used.

Table 1: *Articles used in this systematic literature review with title, authors, year of publication, country, sample size, and theory*

Article Title	Authors	Year	Country	Sample Size	Theory
Why Do Users Switch to Smart Homes? A Push-Pull-Mooring Framework.	Xiaofan Yu, Yichen Ye, Bilu Chen, Shaomin Yan, and Shan Wu	2024	China	412	Push-Pull-Mooring (PPM) framework
Critical Factors Influencing the Adoption of Smart Home Energy Technology in China: A Guangdong Province Case Study.	Weiyu Ji and Edwin Chan	2019	China	1913	- Theory of Planned Behavior (TPB) - Norm Activation Model (NAM)
Motivations, Barriers and Risks of Smart Home Adoption: From Systematic Literature Review to Conceptual Framework.	Wenda Li, Tan Yigitcanlar, Isil Erol, and Aaron Liu	2021	Multiple countries, including China	72 articles	- The paper develops a conceptual framework for smart home adoption. - It outlines motivations, barriers, and risks influencing adoption.
Causal Factors of Acceptance Smart Home Technology System among Adolescentes in Zhengzhou, Henan.	Yilin Zhang, Somchai Seviset, and Thanate Piromgarn	2024	China	390	Technology Acceptance Model (TAM)

Article Title	Authors	Year	Country	Sample Size	Theory
Review of the Factors Affecting Acceptance of AI-Infused Systems.	Ulugbek Vahobjon Ugli Ismatullaev, and Sang-Ho Kim	2022	Multiple countries, including China	85 articles	- Theory of reasoned action - Technology acceptance model (TAM) - Unified Theory of Acceptance and Use of Technology (UTAUT)
Impact of COVID-19 on IoT Adoption in Healthcare, Smart Homes, Smart Buildings, Smart Cities, Transportation and Industrial IoT.	Muhammad Umair, Muhammad Aamir Cheema, Omer Cheema, Huan Li, and Hua Lu	2021	Multiple countries, including China	no sample	IoT adoption due to COVID-19 impacts
Smart home for elderly care: development and challenges in China.	Quan Zhang, Meiyu Li, and Yijin Wu	2020	China	no sample	no theoretical model
A study on smart home use intention of elderly consumers based on technology acceptance models.	Chengmin Zhou, Yawen Qian, and Jake Kaner	2024	China	236	(Extended) Technology Acceptance Model (TAM)
Smart homes: pioneering age-friendly environments in China for enhanced health and quality of life.	Ingy Shafei, Jyoti Khadka, and Madhan Balasubramanian	2024	China	no sample	Smart home model
Artificial Intelligence for Creating a Digitized Lifestyle and Multifaceted Applications: A Case Study in the Realm of Smart Home Technology.	Chuan Ju	2024	China	no sample	no theoretical model
Long-Term Adoption or Abandonment of Smart Technology in the Chinese Elderly Home Care Environment: A Qualitative Research Study.	Jiahao Yu, Jianyuan Huang, and Qi Yang.	2023	China	26	Golant's theory of technology adoption behaviors
Integrating Technology Acceptance Model With Maslow's Hierarchy Needs Theory to Investigate Smart Homes Adoption.	Yi Yang, Xiaofan Yu, Zongdeng Zhang, and Li Gan	2023	China	405	- Technology Acceptance Model (TAM) - Maslow's Hierarchy Needs Theory - Innovation Diffusion Theory (IDT) - Value-based Adoption Model (VAM)

Table 1 (continued): *Articles used in this systematic literature review with title, authors, year of publication, country, sample size, and theory*

Article Title	Authors	Year	Country	Sample Size	Theory
Smart home adoption factors: A systematic literature review and research agenda.	Alejandro Valencia-Arias, Sebastian Cardona-Acevedo, Sergio Gómez-Molina, Juan David Gonzalez-Ruiz, and Jackeline Valencia	2023	Multiple countries, including China	12 articles	- (Extended) Technology Acceptance Model (TAM) - Diffusion of Innovations (DOI) - (Extended) Theory of Planned Behavior (TPB)
Psychosocial Factors Affecting Artificial Intelligence Adoption in Health Care in China: Cross-Sectional Study	Tiantian Ye, Jiaolong Xue, Mingguang He, Jing Gu, Haotian Lin, Bin Xu, and Yu Cheng	2019	China	474	- Technology Acceptance Model (TAM) - Theory of Planned Behavior (TPB)
The Influence of User Experience on Consumption Intention: A Study of Smart Home Appliances in China.	Ting Cui and Siti Hassan	2022	China	378	A theoretical model to examine the impact of user experience on consumption intention.
What Influences the Perceived Trust of a Voice-Enabled Smart Home System: An Empirical Study.	Yuqi Liu, Yan Gan, Yao Song, and Jing Liu	2021	China	475	- Innovation Diffusion Theory (IDT) - Social Cognitive Theory (SCT) - Theory of Planned Behavior (TPB) - Technology Acceptance Model (TAM)
The Investigation of Adoption of Voice-User Interface (VUI) in Smart Home Systems among Chinese Older Adults.	Yao Song, Yanpu Yang, and Peiyao Cheng	2022	China	420	- Technology Adoption Model (TAM) - Senior Technology Adoption Model (STAM)
The effects of technology readiness, risks, and benefits on smart home technology adoption: extending the Theory of Planned Behavior model	Louis Leung and Marsena Cheung	2024	China	501	(Extended) Theory of Planned Behavior (TPB)

Results

This results section presents an in-depth analysis of the findings from the systematic review of the 18 articles (see Table 1). It covers critical aspects, including the characteristics of the Chinese consumer population in the adoption of AI-based smart home technologies, the theoretical and conceptual frameworks supporting these studies, the research methodologies employed, and the main findings related to adoption factors. Additionally, this section discusses identified research gaps, offering a well-rounded perspective on the topic and highlighting potential areas for future investigation to advance understanding in this field.

Descriptive quantitative analysis of the sample

Based on the data provided in Table 1, this systematic literature review's 18 peer-reviewed academic articles were published between 2019 and 2024 to understand current research results better and demonstrate the recent interest in adopting AI-based smart home technologies in China. Most studies employed quantitative research methods, particularly survey-based studies, to gather insights from Chinese consumers, with sample sizes varying between 263 and 1913. The qualitative studies, especially the three systematic literature review articles, have smaller sample sizes (26-85). They were included in this systematic literature review to explore adoption factors in broader contexts, such as from other countries besides China. Each study centered around China, either directly or as part of a comparative analysis, ensuring that the findings are relevant to understanding consumer behavior within the Chinese market for AI-based smart home technologies.

Theories used

The main theories applied across the reviewed studies include the Technology Acceptance Model (TAM), Theory of Planned Behavior (TPB), Theory of Reasoned Action (TRA), Unified Theory of Acceptance and Use of Technology (UTAUT), Push-Pull-Mooring (PPM) framework, and the use of general conceptual frameworks.

1. The Technology Acceptance Model (TAM) appears most frequently, referenced in 9 instances across studies, including its variations and extensions.
2. The theory of Planned Behavior (TPB) is closely followed by ten mentions, often integrated to explore behavioral intentions related to technology adoption.
3. Push-pull-mooring (PPM) is used twice, indicating interest in push-pull dynamics tailored to adoption motivations and barriers.
4. Other theories, like the Theory of Reasoned Action (TRA), Value-based Adoption Model (VAM), Social Cognitive Theory (SCT), Senior Technology Adoption Model (STAM), Maslow's Hierarchy of Needs, Diffusion of Innovations (DOI), Unified Theory of Acceptance and Use of Technology (UTAUT), and general Conceptual Frameworks, each appear once.

The dominance of TAM and TPB suggests a strong preference for established behavioral models to understand adoption patterns in AI-based smart home technology among Chinese consumers. Additionally, some articles developed unique theoretical models or needed to apply a specific theoretical framework. This range of theories reflects the multidisciplinary approach to exploring factors influencing AI-based smart home technology adoption among Chinese consumers.

Methods used

The diversity in methodological approaches across these peer-reviewed academic articles underscores the evolving nature of this research domain. Quantitative studies with large, representative samples are predominant, offering statistically robust insights into consumer attitudes and behaviors (Leung & Cheung, 2024; Zhang et al., 2024; Liu et al., 2022; Ji & Chan, 2020). The preferred data analysis method is Partial Least Squares Structural Equation Modeling (PLS-SEM), suitable for complex models, small sample sizes, and a focus on predicting consumer behavior. Qualitative studies are rare, which is surprising for a relatively new research field. Among them are systematic literature reviews, like those by Li et al. (2021) and Ismatullaev and Kim (2022), which provide synthesized insights from multiple contexts and geographies, highlighting commonalities and specificities in Chinese consumers' responses to AI-based smart home technologies (AI-SHT).

Motivating factors for adoption

A prominent motivation among Chinese consumers is the perceived convenience and enjoyment of smart home technologies, which are transformative for routine household management (Yu et al., 2024). This convenience is coupled with the appeal of unique and engaging user experiences, which enhance user satisfaction and drive adoption (Ju, 2024). In addition, technical performance is crucial in attracting users, especially affluent individuals who prioritize reliable, efficient systems for their homes. This demographic values both the technological and economic benefits, notably energy savings and cost-efficiency, which are compelling reasons for adoption (Ji & Chan, 2019).

Another driver is the potential for these technologies to improve health and quality of life, especially among elderly users. Smart home applications in healthcare and elderly care promote safety and support daily living activities, alleviating pressures on traditional care systems (Shafei et al., 2024). This feature has increased adoption interest, mainly as smart homes provide elderly individuals with enhanced independence, a critical factor in an aging society (Zhou et al., 2024). Social influences, including subjective norms and family support, positively impact adoption intentions, particularly among older users who benefit from intergenerational technology support (Song et al., 2022).

Barriers to adoption

Despite the appealing aspects of smart home technologies, several barriers hinder widespread adoption. Financial constraints are a significant concern, particularly among less affluent users who might not see immediate economic returns on investment in smart home systems (Umair et al., 2021). Privacy and security issues further complicate adoption, as users remain wary of data protection and potential unauthorized access, raising concerns about trust in these systems (Leung & Cheung, 2024; Li et al., 2021). Trust in technology plays a significant role, with low trust levels among some consumers slowing adoption. Enhancing transparency, compatibility, and reliability is crucial to address these concerns (Ismatullaev & Kim, 2022).

Technology anxiety and distrust also serve as significant psychological barriers, with many consumers hesitant to fully embrace AI-driven home systems due to unfamiliarity and concerns about reliability (Cui & Hassan, 2022). These anxieties mainly affect older users, who are likelier to abandon technology that does not align with their lifestyle habits and preferences (Yang et al., 2023).

Demographic influences on adoption

Demographic factors, particularly age and economic status, shape adoption trends. Affluent and younger consumers are likelier to adopt smart home technologies, focusing on technical and economic benefits, while juveniles prioritize performance over cost concerns (Ji & Chan, 2019). Among elderly users, adoption is facilitated by intergenerational support and user-friendly design, highlighting the importance of a supportive social environment in encouraging technology use (Zhou et al., 2024). However, these same users are more likely to abandon technology if it fails to meet their long-term needs, showing a preference for systems that align closely with their routines (Yang et al., 2023).

Future Research

Research on adopting AI-based smart home technologies among Chinese consumers calls for deeper investigation into theories, methods, demographic impacts, hardware innovations, and industry-specific applications. Many studies highlight the need to explore the Unified Theory of Acceptance and Use of Technology (UTAUT) model in the context of smart home technologies to understand

DOI 10.2440/013-0002

better the cultural and demographic differences influencing adoption. For instance, Yu et al. (2024) suggest examining cultural variations and age impacts on post-adoption behaviors. Ji and Chan (2019) recommend assessing the influence of education and social norms in diverse Chinese populations. Valencia-Arias et al. (2023) further emphasize the importance of UTAUT in addressing gaps in understanding adoption in emerging markets and among lower-income groups, as existing studies predominantly focus on middle- and high-income users.

Methodologically, calls for more longitudinal and mixed-methods research are prevalent, as many studies have relied on cross-sectional data, which limits insights into long-term adoption trends and technology retention. Zhou et al.(2024) propose improving assessment subjectivity by including longitudinal studies to capture evolving user perceptions, especially in aging populations. Li et al. (2021) argue that mixed-method approaches better analyze consumer privacy and security concerns perspectives. Ye et al. (2019) suggest longitudinal studies on AI trust development, particularly in healthcare applications. Cui and Hassan (2022) support field experiments focusing on the usability of voice-user interfaces for older adults to validate current findings and investigate sustained usage.

Demographically, age and socio-economic status are recurring areas for further exploration. Zhang et al. (2024) emphasize studying the unique needs of adolescents in smart home contexts, including privacy and data security, while Shafei et al. (2024) urge addressing the digital divide that often marginalizes elderly users. Zhou et al. (2024) also highlight the importance of intergenerational technology support for elderly users, suggesting this may improve acceptance among older demographics. Valencia-Arias et al. (2023) underscore the need to investigate how smart home technologies impact people with disabilities, a group often overlooked in the literature but potentially benefitting significantly from such technologies.

Regarding hardware, scholars call for research into integrating AI and IoT to optimize smart home efficiency, especially in high-demand areas like healthcare and telecommunications. Zhang et al. (2024) propose studies on IoT-enabled deep learning models that enhance automation and sustainability. Yu et al. (2023) recommend predictive maintenance applications to improve device longevity and user experience. Additionally, Umair et al. (2021) note that IoT adoption in smart buildings could benefit from semantic-aware models to support advanced automation and remote control.

Finally, the healthcare industry represents a significant application of AI-based smart home technologies with calls for targeted research. Zhang et al. (2020) emphasize the development of technical standards for elderly care to support safe and effective integration with public and private healthcare systems. Further research on AI-driven healthcare devices for elderly users, particularly concerning trust and practical utility, is recommended by Ye et al. (2019). These studies indicate that healthcare and telecommunications may offer valuable contexts for understanding smart home adoption as they address critical issues of safety, privacy, and emotional well-being across different age groups and professional applications.

Conclusion

This systematic literature review aimed to identify the factors influencing the adoption of AI-based Smart Home Technologies among Chinese consumers.

This systematic literature review aimed to identify and analyze factors influencing the adoption of AI-based smart home technologies among Chinese consumers. The findings reveal that adoption is shaped by a combination of individual, social, and technological factors, with models like the Technology Acceptance Model

***Table 2:** Articles used in this systematic literature review with research methods used, results, calls for future research*

Article Title	Research Question	Methods Used	
Why Do Users Switch to Smart Homes? A Push-Pull-Mooring Framework.	The research question investigates factors impacting switching to smart homes.	Quantitative Study	
Critical Factors Influencing the Adoption of Smart Home Energy Technology in China: A Guangdong Province Case Study.	The research examines factors influencing the adoption of smart home technology and focuses on urban residents in Guangdong Province, China.	Quantitative Study with a data analysis using PLS-SEM methodology.	
Motivations, Barriers and Risks of Smart Home Adoption: From Systematic Literature Review to Conceptual Framework.	The research question addresses motivations for smart home adoption, barriers, and risks.	A systematic literature review using the PRISMA model.	
Causal Factors of Acceptance Smart Home Technology System among Adolescentes in Zhengzhou, Henan.	The study investigates factors influencing adolescent acceptance of smart homes.	Quantitative Study with a data analysis using PLS-SEM methodology and confirmatory factor analysis.	
Impact of COVID-19 on IoT Adoption in Healthcare, Smart Homes, Smart Buildings, Smart Cities, Transportation and Industrial IoT.	The research question focuses on COVID-19's impact on IoT adoption.	- Qualitative Literature review of existing research on IoT adoption. - Examine reports from leading consulting firms. - Interactions with industry experts for insights.	

DOI 10.2440/013-0002

	Results	***Future Research***
	- The study identified significant push, pull, and mooring factors. - Dissatisfaction significantly influences users' switching intentions. - Perceived convenience is the main pull factor. - Variety-seeking is the primary mooring factor. - Users are motivated by unique smart home experiences.	- Investigate the moderating effects of different types of smart homes. - Explore age's impact on behavioral intentions towards smart homes. - Examine cultural variations in post-adoption behaviors. - Analyze unique smart home experiences influencing user switching behavior. - Study push, pull, and mooring factors in diverse contexts.
	- Residents' attitude towards technical performance positively influences adoption intention. - Social norms impact the intention to adopt smart home technology. - Perceived behavioral control affects adoption intention positively. - Personal norms also positively influence adoption intention. - Attitude towards economic performance does not lead to intention to adopt. - Older adults show no factors driving SHET adoption. - Juveniles only support adoption based on technical performance. - Affluent individuals consider economic performance when deciding on adoption intention.	- Investigate factors influencing elderly adoption of smart home technology. - Explore regional cultural impacts on adoption intentions. - Assess the long-term effects of government policies on technology adoption. - Examine demographic variations in adoption across different education levels. - Analyze social norms' influence on adoption in diverse populations.
	- Prominent services include healthcare, energy efficiency, and home security. - Primary motivations are energy management and enhanced quality of life. - Main barriers include distrust, financial issues, and privacy concerns. - Key risks involve privacy threats and technology domestication challenges. - The study proposes solutions to improve smart home acceptance.	- Address significant research gaps in smart home adoption. - Explore solutions for smart home technology domestication. - Investigate consumer perceptions of smart home technology. - Analyze the impact of privacy and security concerns. - Study the effectiveness of smart home services in various demographics.
	- A positive relationship exists between product attitudes and behavioral intentions. - User personal capabilities predict the adoption of smart home technology. - Individual ability influences perceived ease of use and usefulness. - Findings guide smart home product design for adolescents.	- Explore deep learning and IoT for smart home efficiency. - Investigate integration with smart cities for sustainable development. - Assess user-centered design in smart home technology. - Study impact on daily life and user convenience. - Examine privacy and data security concerns in smart homes.
	- COVID-19 catalyzed IoT adoption across various sectors. - Smart homes revenue is expected to reach $317 billion by 2026. - Financial strain hinders immediate IoT investment in industries. - Long-term work-from-home policies drive IoT device adoption. - Challenges identified for accelerated IoT adoption in multiple sectors.	- Digital maintenance of equipment for future pandemics. - End-to-end automation in various industries. - Advanced remote collaboration and asset control. - Development of virtual reality for remote equipment operation. - Creation of semantic-aware models for smart buildings. - Analytics for indoor mobility data in smart buildings. - Solutions for emerging problems in IoT sectors.

Table 2 (continued): *Articles used in this systematic literature review with research methods used, results, calls for future research*

Article Title	Research Question	Methods Used	
Review of the Factors Affecting Acceptance of AI-Infused Systems.	The study investigates factors affecting AI-infused systems' adoption.	A systematic literature review using the PRISMA model.	
Smart home for elderly care: development and challenges in China.	The status quo and development of smart homes for elderly care in China are reviewed, and suggestions are provided on further developing China's smart homes for elderly care.	Qualitative literature review articles, including a historical analysis	
A study on smart home use intention of elderly consumers based on technology acceptance models.	The study investigates elderly consumers' intentions to use smart home technology and explores factors influencing acceptance of this technology.	A quantitative study with SEM evaluates the reliability of items and constructs, and confirmatory factor analysis assesses the model's path effects and validity.	
Smart homes: pioneering age-friendly environments in China for enhanced health and quality of life.	The research question is about the adoption of a 'smart home' model in aged care in China.	Opinion piece to elaborate the perspectives of the smart home model in aged care in China.	
Long-Term Adoption or Abandonment of Smart Technology in the Chinese Elderly Home Care Environment: A Qualitative Research Study.	The research question focuses on AI's impact on smart homes.	Qualitative study	

DOI 10.2440/013-0002

	Results	Future Research
	- User Attitudes and Trust: Enhancing transparency, compatibility, and reliability of AI devices can improve users' attitudes, trust, and perceptions of the technology. - Task Simplification: Simplifying tasks performed by AI devices can make the technology more accessible and appealing to users. - Technological Factors: Addressing technological aspects can help mitigate issues stemming from human factors like distrust, skepticism, and inexperience with AI. - Support for Low-Trust Users: Technological improvements can encourage adoption among users with lower intentions to use and trust AI systems.	- Findings suggest extending the TAM to incorporate these factors to better understand and accept AI across various applications. Further research is needed to gather more data and validate these insights. - Conduct large-scale reviews across more application areas. - Perform experiment-based research in specific fields. - Validate findings through experiments or surveys.
	- China's smart home for elderly care has progressed significantly. - Development stages include seed, start-up, development, and popularization. - Unique characteristics create challenges for further development. - Insufficient demand leads to waste of public resources. - Technical standards for services need urgent formulation. - Combination of public and private platforms is essential. - Increasing demand for home-based care presents opportunities. - Cost-benefit ratio and service compatibility require improvement.	- Development of technical standards for elderly care services. - Integration of public and private smart home care platforms. - Encouragement for enterprises to innovate new technologies. - Exploration of industry technical standards by local associations.
	- Perceived usefulness positively affects the intention to use smart homes. - Perceived ease of use positively affects the intention to use smart homes. - Perceived ease of use enhances the perceived usefulness of smart homes. - Intergenerational technology support influences older users' acceptance of smart home technology.	- Improve the subjectivity of assessment methods in research. - Explore factors influencing smart home acceptance among diverse age groups. - Analyze challenges in the aging smart home market. - Investigate intergenerational technology support for elderly users. - Study ethical issues related to smart home technology.
	- The paper advocates for a smart home model in aged care. - It emphasizes the need for technology in-home care. - Adoption of digital technologies can enhance healthy aging. - Co-creation with end-users is crucial for effective implementation. - The traditional family care model is increasingly unsustainable. - Smart homes can alleviate pressure on healthcare systems.	- Addressing the digital divide in smart home solutions. - Exploring ethics and regulatory issues in smart home technologies. - Investigating the successful implementation of smart home solutions for older adults. - Enhancing training for better adoption of gerontechnologies.
	- AI significantly impacts the development of smart home technology. - Digital homes enhance convenience, comfort, and security. - Smart homes integrate IoT for efficient appliance interconnection. - Large-scale model technology optimizes equipment operation and maintenance. - Personalized experiences improve user interaction and satisfaction.	- Integration of AI with human learning for knowledge sharing. - Enhancing emotional intelligence in machine-human interactions. - Addressing technological and application challenges in smart homes. - Exploring personalized services in digital home environments. - Investigating predictive maintenance for digital home devices.

Table 2 (continued): *Articles used in this systematic literature review with research methods used, results, calls for future research*

Article Title	Research Question	Methods Used	
Artificial Intelligence for Creating a Digitized Lifestyle and Multifaceted Applications: A Case Study in the Realm of Smart Home Technology.	This article aims to analyze the impact of artificial intelligence on smart homes.	Qualitative study with an applied case study design based on a literature review.	
Integrating Technology Acceptance Model with Maslow's Hierarchy Needs Theory to Investigate Smart Homes Adoption.	The study explores technology adoption or abandonment by elderly users.	Qualitative study based on semi-structured interviews and thematic analysis	
Smart home adoption factors: A systematic literature review and research agenda.	The research investigates factors influencing smart home adoption intentions.	Qualitative, systematic literature review using the PRISMA model.	
Psychosocial Factors Affecting Artificial Intelligence Adoption in Health Care in China: Cross-Sectional Study	The study examines the acceptance of ophthalmic AI devices and the factors influencing the intention to use these devices.	A quantitative study with SEM and confirmatory factor analysis assesses the model's path effects and validity.	
The Investigation of Adoption of Voice-User Interface (VUI) in Smart Home Systems among Chinese Older Adults.	The study explores factors influencing perceived trust in smart home systems.	Quantitative Study with a data analysis using PLS-SEM methodology.	

	Results	Future Research
	- Improve human-machine interaction for a more comfortable and personalized digital home experience. - Integrate machine and human learning for shared knowledge, advancing from "intelligence" to "wisdom" in digital home systems. - Develop advanced data processing to offer richer, more precise services in human-machine integration. - Enhance emotional intelligence in machines for better response to human emotions, adding warmth to digital home interactions. - Support the creation of a smart society by embedding digital homes into social systems, improving the overall quality of life.	There are no calls for further research
	- Elders' adoption depends on user experience with smart technology. - Lack of clear advantages leads to abandonment of smart technology. - Key reasons for abandonment include low effectiveness and usability. - Continuous application requires meeting elders' long-term needs. - Ignoring living habits contributes to technology abandonment.	- Explore reasons for the long-term use of smart technologies among elders. - Investigate the abandonment of smart technology from diverse subject perspectives. - Assess the effectiveness of smart technology in meeting elderly needs.
	- The existing research has focused predominantly on the leading models of adoption, such as the TAM, DOI, and TPB, with limited attention given to one of the leading models of adoption and use of technology, i.e., the UTAUT. - Although perceived reliability is currently positioned as the most important variable of the adoption of smart homes, the main theories that allow understanding of the variables that determine perceived reliability in the adoption of smart homes is unknown. - Among the variables identified in the scientific literature, attitude toward use has received little attention from researchers.	- Studies on the adoption of smart homes address the context of more developed countries, omitting the variables that affect the adoption of this technology in homes in emerging countries. - There is a lack of research on the adoption of smart home technologies by people with disabilities, despite the potential impact on their quality of life. - Research tends to focus on urban environments, leaving a gap in understanding smart home adoption in rural communities where needs and challenges may be different. -Most studies have examined smart home adoption among middle- and high-income groups, leaving a gap in understanding how low-income people perceive and use these technologies.
	- Intention to use was significantly affected by subjective norms and perceived behavior control. - Trust moderated the effect of perceived usefulness on intention.	- Investigate age as a moderator in AI adoption. - Explore medical staff's views on ophthalmic AI devices. - Assess practical utility for older generations in AI devices. - Examine trust's role in the acceptance of AI technology.
	- System quality significantly influences perceived trust in smart home systems. - Perceived enjoyment directly affects perceived trust. - Subjective norms are crucial for Chinese users' trust. - Familiarity and technology optimism indirectly impact perceived trust.	- Influence of personality traits on perceived trust. - Analysis of user types affecting perceived trust. - Mediation role of perceived enjoyment between familiarity and trust. - Exploration of technology optimism's impact on perceived trust. - Examination of individual characteristics like gender and income.

Table 2 (continued): *Articles used in this systematic literature review with research methods used, results, calls for future research*

Article Title	Research Question	Methods Used	
The Influence of User Experience on Consumption Intention: A Study of Smart Home Appliances in China.	The study investigates older adults' adoption of VUI in China. It explores factors influencing adoption, including trust and aging characteristics.	Quantitative Study with a data analysis using PLS-SEM methodology.	
What Influences the Perceived Trust of a Voice-Enabled Smart Home System: An Empirical Study.	The study investigates user experience's influence on consumption intention.	Quantitative Study with a data analysis using AMOS-SEM methodology.	
The effects of technology readiness, risks, and benefits on smart home technology adoption: extending the Theory of Planned Behavior model	This study investigated generational differences in the roles of technology readiness (TR), risks, and benefits on the behavioral intention of smart home technology.	Quantitative Study	

(TAM) and Theory of Planned Behavior (TPB) frequently employed to examine critical determinants, including perceived usefulness, ease of use, social influence, and trust in technology. Privacy concerns, data security, and the cost of smart home devices also emerged as critical considerations, especially within the Chinese cultural and economic context (Yu et al., 2024; Ji & Chan, 2019; Chen et al., 2024). Methodologically, quantitative approaches dominated the research, often utilizing large samples to explore behavioral patterns, while a smaller number of studies employed systematic literature reviews or conceptual frameworks to provide broader insights (Li et al., 2021; Ismatullaev & Kim, 2022). Focusing on Chinese consumers underscores unique adoption dynamics tied to cultural

DOI 10.2440/013-0002

	Results	Future Research
	- Older adults' adoption of VUI is influenced by perceived usefulness. - Perceived ease of use also affects the adoption of VUI. - Trust is a key factor in adopting VUI. - Aging-related characteristics mediate the adoption factors. - Mobile self-efficacy positively influences trust and ease of use. - Self-actualization positively impacts perceived usefulness and ease of use. - Technology anxiety has a marginal influence on perceived ease of use. - No significant influence from perceived physical conditions was found.	- Validate results for older adults who are not frequent online users. - Conduct user studies on VUI usability issues. - Focus on older adults aged 65 and above. - Explore actual usage and continuous usage of VUI. - Use field experiments to validate current findings.
	- User experience positively impacts the intention to consume smart appliances. - Sensory, performance, emotional, interactive, and associative experiences influence consumption intention. - No significant gender differences in user experience and consumption intention. - Emotional experience significantly enhances consumers' consumption intention. - Four marketing strategies proposed for smart home appliances in China.	- Investigate the impact of user experience on smart appliance sales. - Explore gender differences in user experience perceptions. - Study emotional experience in diverse usage scenarios. - Analyze marketing strategies for enhancing user experience. - Examine environmental factors influencing the intention to consume smart appliances.
	- Low Adoption Rate: Smart home technologies had limited adoption in Hong Kong at the time of the survey. - Drivers of Adoption Intentions: - Theory of Planned Behavior (TPB) Components: Higher adoption intentions were associated with attitudes, subjective norms, and perceived behavioral control. - Technology Readiness (TR): Optimism and innovativeness also motivated adoption intentions. - Tangible Benefits: Perceived benefits, such as energy, cost, and time savings, encouraged adoption. - Trendiness: The appeal of staying up-to-date with trends further supported adoption intentions. - Inhibiting Factors: Psychological risks, such as concerns about privacy and security, hindered intentions to adopt smart home technologies. - Interaction Effect: The study found that attitudes toward IoT and tangible benefits shape behavioral intentions, offering a nuanced understanding of factors influencing smart home adoption.	

norms, social expectations, and increasing urbanization, highlighting both the potential and challenges of integrating AI in smart home environments within this market.

This review synthesizes current knowledge on adoption factors. It underscores gaps that future research should address, such as applying alternative models like UTAUT, exploring age-based adoption patterns, and studying applications in various industries like healthcare and telecommunications. These insights offer a foundation for researchers and industry practitioners to better understand and foster the adoption of AI-based smart home technology among Chinese consumers.

Author Contact Information

Correspondence regarding this article should be directed to T. Kuziaev at timur.kuziaev@student.eim.education.

Conflict of (Competing) Interest

The authors declare that they have no (competing) financial or non-financial interests related to this study.

Funding

The authors self-funded the research, and no external funding was obtained for its completion.

Author Contributions

T. Kuziaev contributed to the manuscript's conception, design, data collection, analysis, and drafting of the manuscript. M. Neubert supervised the research, provided critical feedback, and guided the interpretation of results and manuscript revisions. Both authors reviewed and approved the final version of the manuscript and agreed to be accountable for all aspects of the work.

Acknowledgments

None.

Data Availability and Supplementary Material

All data generated and analyzed during this study and supplementary material are available upon reasonable request.

Prior Publication

The authors confirm that this research has not been published previously and is not under consideration for publication elsewhere.

Ethics Statement

This study complies with the ethical guidelines of the European Code of Conduct for Research Integrity and adheres to the GDPR requirements for data protection. Ethical approval was obtained from the Institutional Review Board of EIM, and informed consent was secured from all participants.

Responsible AI Ethics Statement

In this study, artificial intelligence (AI) tools were used to support tasks such as identifying relevant literature, analyzing datasets, and editing textual content. These tools were employed solely to enhance efficiency, and their outputs were critically reviewed to ensure alignment with research objectives. The use of AI adheres to ethical principles outlined in the EU AI Act, the OECD AI Principles, and the UNESCO Recommendation on the Ethics of Artificial Intelligence, emphasizing transparency, fairness, and accountability. The authors made all final decisions and retain full responsibility for this research's integrity, rigor, and conclusions.

References

Cui, T., & Hassan, S. H. (2022). The Influence of User Experience on Consumption Intention: A Study of Smart Home Appliances in China. *Humanities and Social Sciences Letters, 10*(3), 394-405.

Halkias, D., & Neubert, M. (2020). Extension of Theory in Leadership and Management Studies Using the Multiple Case Study Design. *International Leadership Journal, 12*(2), 48–73. https://doi.org/10.2139/ssrn.3586256

Halkias, D., Neubert, M., & Harkiolakis, N. (2023). Multiple Case Study Data Analysis for Doctoral Researchers in Management and Leadership. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.4423757

Ismatullaev, U. V. U., & Kim, S. H. (2024). Review of the factors affecting acceptance of AI-infused systems. *Human Factors, 66*(1), 126-144. https://doi.org/10.1177/00187208211064707

Ji, W., & Chan, E. H. (2019). Critical factors influencing the adoption of smart home energy technology in China: A Guangdong province case study. *Energies, 12*(21), 4180. https://doi.org/10.3390/en12214180

Ju, C. (2024). Artificial Intelligence for Creating a Digitized Lifestyle and Multifaceted Applications: A Case Study in the Realm of Smart Home Technology. *Advances in Economics Management and Political Sciences 91*(1), 165-172. https://doi.org/10.54254/2754-1169/91/20240988

Leung, L., & Cheung, M. (2024). The effects of technology readiness, risks, and benefits on smart home technology adoption: extending the Theory of Planned Behavior model. *Media Asia,* 1-22. https://doi.org/10.1080/01296612.2024.2330771

Li, W., Yigitcanlar, T., Erol, I., & Liu, A. (2021). Motivations, barriers and risks of smart home adoption: From systematic literature review to conceptual framework. *Energy*

Research & Social Science, 80, 102211. https://doi.org/10.1016/j.erss.2021.102211

Liu, Y., Gan, Y., Song, Y., & Liu, J. (2021). What influences the perceived trust of a voice-enabled smart home system: an empirical study. *Sensors, 21*(6), 2037. https://doi.org/10.3390/s21062037

Neubert, M. (2022). A Systematic Literature Review about the Speed of Internationalization. *International Journal of Business and Management, 17*(2), 80-111. https://doi.org/10.5539/ijbm.v17n2p80

Neubert, M. (2022). A Systematic Literature Review of Dynamic Pricing Strategies. *International Business Research, 15*(4), 1–17. https://doi.org/10.5539/ibr.v15n4p1

Shafei, I., Khadka, J., & Balasubramanian, M. (2024). Smart homes: pioneering age-friendly environments in China for enhanced health and quality of life. *Frontiers in Public Health, 12*. https://doi.org/10.3389/fpubh.2024.1346963

Song, Y., Yang, Y., & Cheng, P. (2022). The investigation of adoption of voice-user interface (VUI) in smart home systems among Chinese older adults. *Sensors, 22*(4), 1614; https://doi.org/10.3390/s22041614

Umair, M., Cheema, M. A., Cheema, O., Li, H., & Lu, H. (2021). Impact of COVID-19 on IoT adoption in healthcare, smart homes, smart buildings, smart cities, transportation and industrial IoT. *Sensors, 21*(11), 3838. https://doi.org/10.3390/s21113838

Valencia-Arias, A., Cardona-Acevedo, S., Gómez-Molina, S., Gonzalez-Ruiz, J. D., & Valencia, J. (2023). Smart home adoption factors: A systematic literature review and research agenda. *Plos one, 18*(10). https://doi.org/10.1371/journal.pone.0292558

Yang, Y., Yu, X., Zhang, Z., & Gan, L. (2023). Integrating technology acceptance model with Maslow's hierarchy needs theory to investigate smart homes adoption. *IEEE Access, 11*, 80726–80740. https://doi.org/10.1109/ACCESS.2023.3300724

Ye, T., Xue, J., He, M., Gu, J., Lin, H., Xu, B., & Cheng, Y. (2019). Psychosocial factors affecting artificial intelligence adoption in health care in China: cross-sectional study. *Journal of medical Internet research, 21*(10). https://doi.org/10.2196/14316

Yu, J., Huang, J., & Yang, Q. (2023). Long-term adoption or abandonment of Smart Technology in the Chinese Elderly Home Care Environment: a qualitative research study. *Healthcare, 11*(17). 2440. https://doi.org/10.3390/healthcare11172440

Yu, X., Ye, Y., Chen, B., Yan, S., & Wu, S. (2024). Why do users switch to smart homes? A push-pull-mooring framework. IEEE *Access, 12*, 80646 - 80656. https://doi.org/10.1109/ACCESS.2024.3409158

Zhang, Q., Li, M., & Wu, Y. (2020). Smart home for elderly care: development and challenges in China. *BMC geriatrics, 20*, 318. https://doi.org/10.1186/s12877-020-01737-y

Zhang, Y., Seviset, S., & Piromgarn, T. (2024). Causal Factors of Acceptance Smart Home Technology System Among Adolescents in Zhengzhou, Henan. *Revista de Gestão Social e Ambiental, 18*(1). https://doi.org/10.24857/rgsa.v18n1-056

Zhou, C., Qian, Y., & Kaner, J. (2024). A study on smart home use intention of elderly consumers based on technology acceptance models. *Plos one, 19*(3), https://doi.org/10.1371/journal.pone.0300574

A Scientific Definition of Business Ethics

Burkard Schemmel, Karsten Bredemeier
EIM – European Institute of Management, Valetta, Malta

Abstract

There needs to be a consensus about what Business Ethics means. This paper explores the complexity of business ethics and attempts to provide a definition, drawing from reviewing 187 scholarly articles referencing the term business ethics and covering more than 40 years. This study aims to offer a distinct and succinct definition of its communication yet sufficiently broad in its practical applications. As the term's origins can neither be unequivocally placed in academia nor practice, the definition concentrates on extracting the quintessence of Business Ethics using both spheres. Applying semantic analysis and building on the commonalities of 20 peer-reviewed definitions of the term, it is concluded that Business Ethics is widely present in scholarly works in multiple aspects. The implications and shortcomings of this definition are discussed.

#Keywords

Business Ethics, Ethical Leadership, Ethical Decision making, Morale Concepts, CSR, Ethical Frameworks, Exchange Theory, Morale Dilemmas, Virtue Ethics, Ethics of Action, Practical Ethics, Business Behavior, Alterocentric, Altruism.

doi: 10.2440/013-0003

Wirtschaftsethik – eine wissenschaftliche Definition

Derzeit besteht kein Konsens darüber, was der Begriff Wirtschaftsethik bedeutet. Dieser Artikel untersucht die Komplexität der Wirtschaftsethik und versucht, eine Definition zu formulieren, indem er 187 wissenschaftliche Artikel, die den Begriff Wirtschaftsethik verwenden und über einen Zeitraum von mehr als 40 Jahren veröffentlicht wurden, analysiert. Ziel dieser Studie ist es, eine klare und prägnante Definition anzubieten, die sowohl in ihrer Kommunikation deutlich als auch in ihren praktischen Anwendungen ausreichend breit ist. Da die Ursprünge des Begriffs weder eindeutig in der Wissenschaft noch in der Praxis verortet werden können, konzentriert sich die Definition darauf, die Quintessenz der Wirtschaftsethik aus beiden Bereichen zu extrahieren. Mittels semantischer Analyse und auf Basis der Gemeinsamkeiten von 20 begutachteten Definitionen des Begriffs wird festgestellt, dass Wirtschaftsethik in der wissenschaftlichen Literatur in vielfältigen Aspekten weit verbreitet ist. Die Implikationen und Schwächen dieser Definition werden diskutiert.

商业伦理的科学定义

目前对"商业道德"一词的含义尚无共识。本文探讨了商业道德的复杂性，并尝试提供一个定义。研究通过审阅187篇学术文章，这些文章提到了"商业道德"一词，覆盖了40多年的研究成果。本研究旨在提供一个清晰简洁的定义，既能准确传达其含义，又能在实践中具有广泛的应用性。由于该术语的起源既无法明确归因于学术界，也无法归因于实践领域，本文的定义集中于结合两者提炼出商业道德的本质。通过语义分析，并基于20个经过同行评审的定义的共同点，研究得出商业道德在学术研究的多个方面中广泛存在。最后，本文讨论了该定义的意义及其局限性。

Introduction

Corporate misconduct and shady business practices like greenwashing and ethical washing have substantially contributed to business ethics as a discipline and, in a broader vein, the advancement of governance and regulation (Rockness 2005, s.a. EU Richtlinie 2019/1937). Over the past decades, business ethics has built a profound body of literature dealing with various corporate scandals and implementing positive organizational ethics (Chakrabarty, Bass, 2014; Poff et al., 2013; Crane, 2016). Some of these ethics and (corporate) social responsibility discussions have been gradually formalized and led to voluntary (soft) and mandatory (hard) laws, guiding business practices in both national and transnational realms (Cominetti, Seele 2016, Rossouw, Van Vuuren 2013), thus, triggering an institutionalization of organizational ethics (Jose, Thibodeaux 1999; Lütge, 2019; Crane, 2016). Nonetheless, corporate misconduct and limited implementation of ethics in firms' daily practices persist, indicating limitations of institutionalizing ethics in business (Banerjee, 2008; Crane, 2016; Bartlett, 2003; Lippke, 1991; Orts, Strudler, 2009; Prasad, Mills, 2010).

Business Ethics has been widely referenced in literature and is used in business contexts nowadays, mostly with Corporate Social Responsibility (CSR). Attempts have yet to be made so far to extract a consensual meaning of Business Ethics; instead, the term is applied inconsistently and ambiguously despite many different definitions and scope statements that have been made in scientific papers. However, if business ethics is meant to be meaningful to society, then the methodology and definitions must be precise and uniform. This includes discussing the "philosophy of correct business actions" (Cohen, 2010). A basic common understanding must be established to appreciate the nature of the developments among business leaders and to create a solid foundation for scientific research. Otherwise, a meaningful conversation cannot emerge.

Apart from the scientific rationale, this paper is also motivated by the need for a common understanding of the word Business Ethics by practitioners. As pointed out above, business ethics have become too important and pervasive over the past few years to be neglected by business leaders, consumers of financial services, and policymakers. Suppose there is a minimal common understanding of business ethics, and straightforward communication about the topic can emerge, voiding misunderstandings as much as possible. Correspondingly, leadership can only then make optimal decisions if there is a certain consensus on the subject to be decided on. European consumers tend to interpret Business Ethics as a broad set of expectations about corporate behavior, including legal compliance, social responsibility, transparency, and contributions to sustainable development. Research indicates that European consumers generally favor companies that demonstrate responsibility toward society and the environment. Not surprisingly, from our experience, a negativity bias exists: consumers remember unethical behavior more vividly than ethical actions (CORDIS, 2024). When I ask European consumers to name the most ethical company, people struggle with a clear answer. Research suggests that while consumers are increasingly attentive to ethical business practices, they cannot name specific examples of companies they relate to (Lay, 1998). One reason might be the sheer variety of ethical claims companies make, which can lead to consumer confusion about real practices versus overstating the activities or even "whitewashing" (Innova Market Insights, 2024). There is a gap in consumer understanding of corporate ethics, and this is due to the lack of a universally accepted ethical certification standard.

This nescience of Business Ethics among consumers then raises the following question about economic policies in general and consumer protection in particular: How can policymakers shape adequate rules and regulations in the interest of their constituents if there is no common understanding on the topic?

Hence, this article aims to clarify business ethics by constructing a definition acceptable to academia but firmly grounded in the practical world (Lay, 1978). By doing so, this text aims to construct intertextual coherence (Locke & Golden-Biddle, 1997) in a field that otherwise can be described as unstructured and scattered at best.

The remainder of this paper is organized as follows. First, the background of the term Business Ethics is expounded as it presents itself to us in the most recent times. However, it is also put in an epistemological context, and the historical background is derived. Next, I focus on the scientific methods applied. The results of the literature survey include a semantic analysis. In a critical discussion, we debate the findings and lay out conclusions and further actions for research. There is also an open question on the personal responsibility of company leaders.

Background

According to Google, the term "Business Ethics" receives an average of approximately 201’000 searches monthly worldwide (Google, 2024, perplexity 2024). Analyzing the term "Business Ethics" on Google shows broader search behavior patterns that can help gauge interest and engagement in this area.

Mobile Dominance

Over 60% of searches in 2024 will come from mobile devices, signaling a substantial shift toward more agile research and decision-making. This shift also favors mobile-friendly content, which is shorter and easier to consume (WAZILE Inc., 2024; Coalition Technologies, 2024).

Informational Intent

People looking for ethical topics on Google do this primarily for informational purposes. They seek specific information, not commercial services. One particular focus is the relevance and recent developments of business ethics. This proves that any business should provide transparent, trustworthy, and educational content about their services, offerings, and initiatives rather than selling “ethical services” or changing their offering towards an “ethical product” (Demand & Convert, 2024).

Local and Ethical Queries

Searches with local intent, especially those involving the phrase “near me” or the hometown, have surged over the past years. Users are interested in locally available ethical businesses. This is consistent with increased Corporate Social Responsibility (CSR) in search terms (Coalition Technologies).

Epistemological considerations

Epistemology is the philosophical study of knowledge and addresses the nature and scope of what we know and how we know it. It also addresses the limits of our knowledge. Epistemology seeks to understand cognitive success or failure. The epistemological foundations of business ethics are multifaceted, involving debates over the nature of ethical knowledge, its sources, and its application in practice (Crane, 2016). In business ethics, we can differentiate between normative theories, which provide objective frameworks for decision-making (one of the key topics in literature). These pragmatic and constructivist approaches focus on the importance of business context in which ethical questions emerge, hands-on stakeholder management, and the adaptability of ethical answers to a specific business context. This can be a specific business process, industry, or geography. Thirdly, critical perspectives on power and subjectivity raise questions about whose knowledge is valued in corporate ethics and how ethical norms are shaped by or depend on social and institutional power structures.

Business ethics is an interdisciplinary field that investigates the moral principles guiding corporate conduct and communication (Bredemeier, 2019). This paper considers four epistemological perspectives: normative ethics, pragmatism, constructivism, and the role of power and subjectivity in ethical decision-making (Crane, 2016; Bregman, 2019; Lay, 1998).

Normative Ethics

A foundational question is whether ethical principles can be objectively known and universally applied. Traditional theories like deontology and utilitarianism propose that ethical standards can be derived from objective principles. According to Kant, deontological ethics argues that actions are ethically right or wrong based on adherence to duty and universal principles, independent of outcomes (Kant, 1998). This concept assumes that ethical knowledge is objective, and hence, businesses can adhere to universally applicable rules. No discussion would be needed, but companies would apply a framework of rules, i.e., how to treat stakeholders fairly or avoid harm to society (Lay, 1978; Oakley, 2011). Today, this view is supported by the development of international ethical standards and frameworks, such as the UN Global Compact or ISO 26000, which provide guidelines for corporate ethical behavior across different industries suggested to be valid globally without exceptions (Rasche, Waddock, & McIntosh, 2013).

In contrast, ethical decisions based on the outcomes are a concept articulated by philosophers such as Jeremy Bentham and John Stuart Mill. The key message in consequentialist approaches like utilitarianism is that actions are ethical if they maximize overall happiness or minimize harm (Mill, 1863). Researchers believe that outcomes can be measured and compared with higher flexibility, as the focus is not on fixed moral duties but on the consequences of actions.

Many businesses adopt these normative frameworks to establish codes of conduct, corporate social responsibility (CSR) policies, and compliance mechanisms. These frameworks provide a structured approach to ethical decision-making but often face criticism for their lack of adaptability in complex, culturally diverse, or evolving business environments (Donaldson & Dunfee, 1999). There is also the question of to what extent these frameworks are applied in a corporate context (and how many decisions are made without considering the structured approach requested by the company).

Pragmatism

The pragmatist epistemological tradition introduces a more dynamic and context-sensitive approach to business ethics. Pragmatism, rooted in the works of philosophers like William James and John Dewey, suggests that ethical knowledge is not fixed or universal but evolves through practical experience and problem-solving (Dewey, 1938). A pragmatic approach to business ethics, like utilitarianism, has the outcomes in mind and enhances the view to adaptability and stakeholder engagement. Pragmatic business ethics rejects the notion of absolute ethical standards, arguing instead that ethical knowledge is constructed through an ongoing reflection by leaders on the consequences of their doing. This approach aligns with stakeholder theory, which suggests that ethical decisions should account for the interests of all stakeholders – at least employees, customers, communities, and shareholders (Freeman, 1984). Pragmatism encourages businesses to engage with diverse perspectives and adapt their ethical practices to the changing social, economic, and environmental contexts in which the stakeholders operate or relate.

Regarding global business operations, pragmatism is often used to help organizations and their leaders navigate complex ethical challenges across different cultures, legal frameworks, and government legislation. Applied skillfully and consistently, pragmatism also encourages a more inclusive approach to ethical decision-making as it considers the views and needs of marginalized or underrepresented stakeholders. These are groups of people who do not directly contribute to the business outcomes or whose contribution is smaller than others (Bowie, 2002).

Constructivism

Ethical knowledge is socially constructed rather than objectively determined, which is the idea constructivism stands for. Constructivist theories, informed by thinkers like Peter Berger and Thomas Luckmann (1966), argue that ethics are shaped by the cultural, social, and institutional contexts in which individuals and organizations operate. The key influencing factors are shared practices, norms, and values developed within specific organizations, groups, or industries. Constructivist approaches to business ethics suggest a high degree of variation across different business contexts. The commonly referred example is the differences in ethical norms between a multinational corporation and a small mom-and-pop shop around the corner. The reasons are the regulatory environment, different cultural values, and varying stakeholder expectations. Constructivism is the opposite of a one-size-fits-all ethical framework, as it asks businesses to be sensitive to the ethical standards of the communities and contexts in which they operate (Windsor, 2006). What is considered ethical in one culture may be viewed differently in another, making it difficult to establish universal ethical standards (Donaldson, 1996). Hence, the alignment between the stakeholders plays a key role. Business leaders shall understand the values of all stakeholders and embed them into their decision-making process. This requires a structural approach, high reflection ability, and a procedure to prioritize conflicting ethical expectations (Buchholz & Rosenthal, 2005).

The Role of Power

The relationship between power and knowledge is one of the central concerns in the epistemology of business ethics. In hierarchical organizations, senior leaders influence ethical decisions by definition (as they generally influence decisions), which reflect personal preferences for certain groups over others. Michel Foucault's theory of knowledge and power (1980) has outlined how ethical norms are established, enforced, and contested in hierarchical settings. Not surprisingly, Foucault suggests that ethical knowledge is neither objective nor neutral. Instead, it is influenced by the power structures within organizations, companies, or societies. In a business context, senior executives, such as the board of directors or the CEO, shareholders, or regulatory bodies, define what is considered ethical. Voices of less influential stakeholders may be marginalized. This raises important epistemological questions about whose knowledge is legitimate and how ethical decisions are justified: Feminist ethics or the postcolonial theory, among others, demands a more inclusive and participatory approach to ethical decision-making. It demands leaders acknowledge the diversity of perspectives and experiences within organizations and apply them in defining ethical norms (Young, 2004). Consequently, if ethical knowledge is subjective, businesses must be attuned to the diversity of ethical perspectives within their stakeholder communities and be prepared to navigate complex ethical dilemmas that do not have explicit, objective solutions (Cohen, 2010). Nevertheless, it could be a call for altruism, charity in economic activity (Richard, 2012), or a

DOI 10.2440/013-0003

clear focus on the objectivity of binding ethics as opposed to metaphysical and end-time religion (Dalai Lama, 2015).

Historical background

The historical development of business ethics demonstrates its evolution from early philosophical and religious principles to a modern, interdisciplinary field that addresses complex global challenges (Crane, 2016). Over the last decades, businesses have grown in size and influence, which led to a recognition of ethical behaviors. The emergence of business ethics as a discipline reflects the growing recognition that corporate behavior has profound moral implications for shareholders, employees, and the wider society. The formal study of business ethics has evolved over the past century. This chapter reviews the historical milestones of classic philosophers like Aristotle and Cicero and the contemporary debates on globalization and technological ethics.

Classical Philosophical Roots

The foundations of business ethics can be traced back to the philosophical traditions of Greek and Roman thinkers. Aristotle's Nicomachean Ethics (Aristotle, 350 BCE) called it "eudaimonia," the concept of human flourishing based on virtues like courage, temperance, and justice. Aristotle defined "his virtues" as essential for individuals to achieve a good and meaningful life. Furthermore, he introduced the concept of differentiation between natural forms of wealth acquisition (necessary for survival) and profit for its own sake (he referred to it as "unnatural"). Cicero and other Roman philosophers addressed fairness, duty, and justice in business. In De Officiis (Cicero, 44 BCE), he argued that honorable conduct in commerce was essential for maintaining social harmony and trust. Many scholars see those classic concepts as the foundation of today's business values like honesty, fairness, and the common good (Solomon, 1992).

Religious Contributions

Religious teachings have covered business ethics early on. The Bible contains numerous references to fair business practices in the Christian tradition, such as condemning dishonest scales and exploitative lending practices (Leviticus 19:36, Deuteronomy 23:19-20). During the medieval period, just price doctrine emphasized that goods should be sold at prices that reflect their actual value. Business people were explicitly asked to avoid exploitation and excessive profit-making (Thomas Aquinas, Summa Theologica, 1265-1274). Scholars consider this as a foundation for current discussions on the ethics of product and service pricing, wages and salaries, and general fairness in commerce.

In the Islamic tradition, Sharia law outlines comprehensive ethical guidelines for business, emphasizing honesty, transparency, and social responsibility in trade and financial transactions. The prohibition of riba (usury) and the principle of zakat (almsgiving) reflect Islam's broader commitment to fairness and social justice in economic life (Naqvi, 1981). These religious traditions established early moral codes for business that still influence ethical standards today.

Most recently, and consistently against all religious thinkers, a current statement from Tibet for the Buddhists by the Dalai Lama reads: "Some days I think it would be better if we had no more religions. All religions and all holy scriptures contain a potential for violence. That is why we need a secular ethic beyond all religions." (Dalai Lama, 2015)

The Industrial Revolution

The 18th and 19th centuries Industrial Revolution brought about significant economic and social transformations, leading to the growth of large corporations and modern capitalism. With the introduction of assembly line work by Henry Ford and others, work-ethical topics started to arise. The era was marked by widespread labor exploitation, particularly in industrialized nations, so labor rights, environmental degradation, and early discussions of corporate responsibility emerged. What are the ethical limits of profit-driven business practices (Hobsbawm, 1962; Crane, 2016)? As businesses grew further and industrialization became the dominant form of labor for many people, the question of a company's moral responsibilities became relevant.

One of the early responses to these challenges came from the labor movement, which fought for fair wages, safe working conditions, and the right to unionize. Andrew Carnegie proposed that "the Wealthy" had a moral obligation to use their resources for the public good. I consider the essay "The Gospel of Wealth" (Carnegie, 1889) to have influenced early notions of corporate philanthropy and social responsibility.

The Development of Modern Business Ethics (1950s-1970s)

The mid-20th century saw the formalization of business ethics as a distinct academic field driven by a combination of social, economic, and political factors. The post-World War II period witnessed the rise of multinational corporations and the spread of capitalism on a global scale. This expansion led to global value chains and international sourcing. It raised ethical concerns about exploiting workers in developing countries, environmental degradation, and the concentration of economic power in the hands of a few corporations and business leaders (Frederick, 2008).

The civil rights movements of the 1960s in the United States influenced the development of business ethics: Issues of racial and gender equality, consumer rights, and environmental protection became central topics of public debate, leading to the development of laws and regulations to ensure corporate accountability. For example, Rachel Carson's Silent Spring (1962) highlighted the environmental consequences of unchecked corporate activity, particularly in the chemical industry, and is widely credited with sparking the environmental movement.

At the same time, US business schools began to integrate ethics into their curricula. The publication of seminal works like Corporate Strategy and Business Policy by William C. Frederick (1960) and Business Ethics by Richard De George (1972) helped establish the academic foundation for business ethics as an academic discipline. Scholars and business representatives began to focus on corporate responsibility and ethical leadership. A debate has also started on the need for businesses to balance profit with social and environmental considerations (De George, 1972).

Latest Developments (1980s-Present)

The 1980s and 1990s were characterized by globalization and the increasing complexity of corporate operations. As a consequence, society's awareness of ethical questions rose. With multinational corporations extending their reach into developing countries (either for sales or sourcing of goods and services or both), existing concerns from the Industrial Revolution got a new twist: Labor rights, environmental sustainability, the ethical implications of outsourcing, and handling global supply chain chains have been topics for ethical considerations (Donaldson & Dunfee, 1999).

During this time, the concept of corporate social responsibility (CSR) was developed. It emphasizes that businesses have a duty beyond shareholders. The stakeholder theory was developed and includes employees, customers, and the environment (Freeman, 1984). The development of international frameworks, such as the United Nations Global Compact (2000) and the ISO 26000 standard on social responsibility (2010), aims to standardize ethical requirements globally (Rasche & Waddock, 2013).

Most recently, ethical investment practices have risen through stock market scores and the emergence of socially responsible businesses, such as B Corporations. Academic research on topics like environmental ethics and ethical leadership has grown. With the rise of artificial intelligence and the knowledge economy driven by data, there is a new debate about specific ethical challenges (Crane, 2016; Matten, 2016).

Lastly, the COVID-19 pandemic has highlighted the importance of ethical decision-making in times of crisis. Environmental, social, and governance (ESG) factors have been further integrated into corporate reporting and are – for many organizations – part of standard decision-making (Gond et al., 2020). Another key development was the establishment of corporate ethics officer roles, especially in response to regulations like the Sarbanes-Oxley Act of 2002.

Methods

We performed a comprehensive, systematic literature review and a thorough semantic analysis (Wahler & Neubert, 2023). This is a qualitative research method (Halkias et al., 2020; 2023). In the first step, I aimed to capture the full scope of definitions of the term "Business Ethics" and distill the pivotal components of the explanations by semantic analysis in the second step. Subsequent paragraphs describe the corresponding sample frame applied and the analysis conducted.

Regarding linguistics, semantics can be defined as the science of the meanings of words and the changes in their meaning (Bréal, 1900). Semantic analysis is, therefore, about understanding language. It is the process of identifying the meaning of linguistic input. Its objective is to process language to produce common-sense knowledge about the world. It does so by extracting data from language, processing it, and subsequently building representations of the world (Bloch & Trager, 1942).

Rather than that, we intend to build on scholars' previous findings and apply semantic analysis to capture the meaning of this word as other scholars previously used it. By doing so, we propose a consensually considered helpful definition. Since we intend to develop a common denominator that can be used as widely as possible, we consider the broadest possible variety of definitions from as many authors as possible (Wahler & Neubert, 2023).

Sample frame

For this literature review, we systematically searched all major literature databases related to Management Sciences and Economics for all papers published until November 2024, using the keyword "Business Ethics." Those databases included EBSCO, Business Source Premier, Directory of Open Access Journals (DOAJ), Emerald Insight, JSTOR, SAGE, Science Direct, Springer Link, Taylor Francis, and Wiley Online Library. To be fully inclusive, we did not define a start date. A delimiter was set to control the quality of the articles so that only scholarly journal articles, i.e., peer-reviewed papers, would be included in the results. Moreover, the relevant language was English. It was ensured that the searches were not case sensitive so that all notations of the search terms were included, i.e., "business ethics" and "business."

Analysis

The definitions obtained were examined using semantic analysis (Goddard, 2011). The overall goal of this analysis was to set apart the definientia, i.e., the defined term, which is Business Ethics, and the definientia, i.e., the defining formulas provided by the various authors (Tarski, 1969). In this context, we attached equal importance to any definition found. As the academic treatment of the topic is vast and much scholarly output exists, we should have made further distinctions among the journal ratings or the number of citations an article has received.

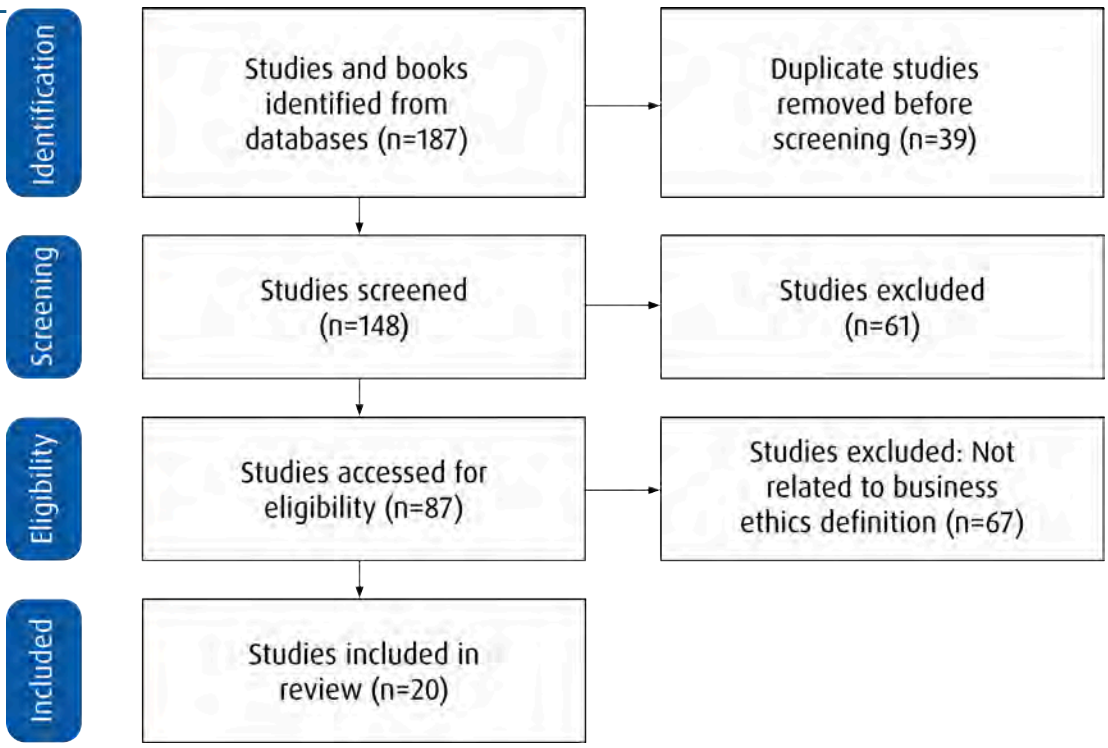
Syntactic structures from definitions of "Business Ethics" were related to more abstract levels to derive meaning as independent as possible from the specific wordings used in the individual definitions. Moreover, specific features were condensed or removed where necessary to lay the basis for developing a clearcut, commonly acceptable definition of the term.

Throughout the analysis, the authors emphasized the objects used to define the term Business Ethics and the attributes they applied to characterize the object further. It further delineated what Fintech comprises/involves and which objectives it pursues. Furthermore, a note was taken of Fintech's results, in case the authors provided this information.

The subsequent results section provides an overview of the quantitative occurrences of Fintech and the specifications used to define it. It furthermore offers a synthesis of the term.

The PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) method was used (Neubert, 2022). PRISMA is a published standard that guides researchers in conducting a systematic literature review (Shafrill et al., 2019). The standard approach was introduced by a team of authors, methodologists, clinicians, medical editors, and consumers (Moher et al., 2009). Commonly used to review reports in clinical trials and other medical studies, the PRISMA method is now extensively being used as the fundamental in reporting systematic reviews for other types of research, such as environmental management (Shaffril et al., 2019), accounting disclosure (Ah Choi & Joseph, 2020), and finance (Bhowmik & Wang, 2020). In Business Ethics, the method was applied by various scholars (Joseph et al., 2023; Daradkeh, 2023). The PRISMA guideline has enabled us to search for terms related to business ethics definitions thoroughly. The PRISMA method can be further illustrated in Figure 1.

Fig. 1:
PRISMA Flow Diagram



Results

The table below presents the number of times the word "Business Ethics" is used in article titles, abstracts, and full-text searches and the number of definitions provided for the term.

Table 1: Counts of "Business Ethics" in databases

"Business Ethic" Hit	Sum of Hit in title and/or text	Sum of Hit in title
Book	**4**	**3**
Bloomsbury Publishing	1	0
Springer Link	2	2
Stanford University	1	1
Peer Reviewed Article	**16**	**10**
British Journal of Management	1	1
Business Ethics Quarterly	2	1
Elsevier	1	0
European Journal of Business and Management	1	0
Frontiers in Psychology	1	0
Harward Business School Online	1	1
Journal of Business Ethics	3	2
JSTOR	1	0
McKinsey	1	1
Springer Link	3	3
Wiley	1	1
Total	**20**	**13**

The results vary enormously among the databases consulted. Across all literature databases, and before adjusting for duplicate entries, 13 scholarly articles display “Business Ethics” in their title. Twenty academic papers use that term in the title and/or one or multiple times throughout the complete text, including footnotes and biographies. The definitions of the term “Business Ethics,” along with the corresponding authors and a semantic analysis, can be found in Table 2 in the appendix.

Summary of Findings

In its current incarnation, business ethics is a relatively new field, growing out of research by moral philosophers in the 1970s and 1980s. However, scholars have been thinking about the ethical dimensions of commerce, at least since the Code of Hammurabi (c. 1750 BC).

Kaptein (2008) and Greenwood (2016) laid the foundation of ethical frameworks: Kaptein’s (2008) ethical framework, known as the Corporate Ethical Virtues (CEV) model, identifies organizational "virtues" that support ethical behavior by employees. These include clarity, consistency, and transparency, which Kaptein (2008) argues are crucial in reducing organizational unethical behavior. His model assumes that these values, combined with open communication, can lead to an ethical work environment that makes unethical practices less likely. Greenwood (2016) emphasizes a social perspective on ethics, arguing that HR procedures must be aligned with societal norms. They must consider the broader impacts on employees and communities. She has developed a framework that connects corporate goals with societal considerations. These frameworks reflect a shift towards embedding ethics within organizational culture and HR practices. Kaptein (2008) focuses on organizational structures that deter unethical behavior, and Greenwood advocates for HRM practices that uphold societal values.

Moriarty started in 2016 by publishing his Exchange Theory in the Stanford Encyclopedia of Business Ethics (Moriarty, 2021). This work summarizes research on central questions in business ethics, including: What sorts of things can be sold? How can they be sold? In whose interests should firms be managed? Who should manage them? What do firms owe their workers, and what do workers owe their firms? Should firms try to solve social problems? Is it permissible for them to try to influence political outcomes? Given the vastness of the field, specific questions still need to be addressed.

Primary Objects of Business Ethics

Beyond frameworks and exchange theory, sorting the definitions by their primary objects, four leading schools of thought are outlined below.

Broader Morale Concepts and Virtue Ethics

Significant concepts of ethical values vis-à-vis business ethics, conversely, have equally been addressed by Drucker (1981) and Bhargava and Velasquez (2021) with particular reference to the Virtue Ethics model so proposed by Boaks et al. (2018). In fact, according to Peter Drucker (1981), business ethics relate to pragmatic and ordinary moral principles applicable to all organizational behaviors. He felt that business should be no exception to the guiding principles of general society, and the principle of "not harm" should be the basis of business ethics. For Drucker (1981), standards that govern business are the same as those of public life, and therefore, it would be most probably considered unethical if power were abused or people exploited. Drucker's framework (1981) is an ethical standard independent from the business environment and, as such, holds organizations to help regenerate trust in and contribute to the common good of society through their behaviors. More recently, Bhargava and Velasquez (2021) addressed the ethics of the Attention Economy. Contrasting the traditional perspective postulated by Drucker (1981), Vikram Bhargava and Manuel Velasquez (2021) emphasized the unique ethical concerns that are inherently a part of the attention economy and even more concerning addictive design in social media. The very idea that could lead to the creation of such platforms for the express purpose of keeping users and possibly addicting them to all types of psychological scheming, they said, is a profoundly moral one. However, Bhargava and Velasquez (2021) believe that such practice does not involve mere exploitation but also violates users' autonomy and well-being. Both see overuse incredibly critically, as it might affect mental health. The authors demand that ethics require stricter policies regarding exploiting users in the digital world, emphasizing vulnerable users and that corporations must assume ethical responsibility, not merely chase after profit. Boaks et al. also note that virtue ethics provides a significant framework through which business leaders can understand what good conduct is.

Contrary to rule-based ethics or consequentialist ones, this focuses on the leaders' kind character and moral fiber. Leaders are to be honest, courageous, and just, notes Boaks et al. (2018), not merely to attain goals. It is an approach that argues that business leaders should behave ethically while developing a character full of virtues to guide them in making decisions and relating to others. Emphasizing virtues would mean that leaders can establish ethical cultures in organizations where trust, respect, and responsibility will always emanate, thus cementing that ethical leadership is not about compliance issues but rather a social benefit.

Company Organization

First, Jackson (1996) and Dacin et al. (2022) conceptualized organizational structures in business ethics. Both dealt with how ethical considerations are integrated within the organizational frameworks and further influence corporate behavior.

Jackson (1996) explained the role of ethics within the organizational structure of businesses. He stressed that ethics should be inherently structured within the company to help it in its decision-making, policy framing, and culture. According to Jackson (1996), organizations need to align their goals with the goals set by society to have ethics at all levels. Dacin et al. (2022) extend Jackson's ideas on how ethics and organizational structure interact within the complexity of contemporary business. They realize the dilemma between profits and ethical responsibilities and support an integrated approach whereby both coexist. The authors argue that within contemporary organizational structures, considerations of interests should shift toward stakeholders, who may impact such decisions through employees, communities, and the environment. This view emphasizes the strategic benefits of ethics-oriented business models that involve building up trust and sustainability of performance in the long run. A structure change would be required to embed ethics at every level, from governance downwards to strategic planning. These views underline the shift in conceptualizing ethics from an extrinsic to an intrinsic organization dimension. Both also encourage a corporate culture that would make ethical responsibilities part and parcel of corporate strategy and governance.

Moral dilemmas

DeTienne et al. (2018) and Hermann (2021) researched moral dilemmas in business ethics, analyzing the intricacies that envelop business leaders when choosing an ethical conflict, its impacts on organizational integrity, and decision-making processes.

DeTienne et al. (2018) believe that moral dilemmas may emerge in conflict with fundamental ethical values. A prevalent example is the tradeoff of profitability against social responsibility. The reason for these situations can be external pressures arising from various parties with different interests. DeTienne et al. (2018) further proposed that these situations could be better handled if the company embraced an open-dialogue culture that would allow employees to share and reflect on the degree of the ethical dilemmas they faced. These authors also suggested that ethical-reasoning training programs are essential to help the leader balance the business objectives with the ability to make ethical decisions.

In 2021, Hermann addressed research on the ethical effects of integrating AI into business processes, especially within marketing. His scholarly work looks at the ethical problems arising when AI is used to maximize profits by targeted advertising, possibly at the cost of customer autonomy and privacy. These complex dilemmas point to a higher-order issue within business ethics, precisely how to balance technological development with societal welfare. Herman submits that organizations might address such challenges by articulating guidelines for the ethics related to the use of artificial intelligence, which are guidelines consistent with values embraced by society. Hermann's framework emphasizes that companies are best able to navigate ethical challenges when considering the impact of AI on all their stakeholders.

DeTienne et al. (2018) and Hermann (2021) stress that a more proactive approach to dealing with moral dilemmas in business ethics is needed through structured ethical frameworks in organizations. These frameworks should assist a company in making ethically correct decisions, meeting its goals, and promoting the good of all stakeholders in its actions.

Decision Making

Scholars like Courtney (2001), Moberg (2006), Benevene et al. (2018), Clegg et al. (2007), MacDonald (2015), and Boyles (2023) have similarly reflected on approaches to how ethics can be conducted within the business arena. In doing so, they focus on providing a framework and considerations through which leaders can successfully navigate complex organizational ethical dilemmas and make better decisions.

Courtney (2001) says that business decision-making often involves those factors that make ethical decisions quite complex. He (2001) thus offers a balanced approach that integrates analytical models and personal intuition to handle such moral intricacies better. In so doing, it provides a venue where leaders are made to consider both analytical input and ethical foresight, which lead to decisions consistent with the goals of the organization and broader ethical consequences.

Moberg (2006) summarizes practical ethics in decision-making and draws his guidance from moral psychology. According to him, the heart of decision-making must gaze not only at consequences but at whether such consequences align with the person's values and principles of the organization. This would require a more structured approach, which could allow for critical thinking while permitting the dissection of moral dilemmas and accessing their impacts on all stakeholders.

Benevene et al. (2018) discuss how these challenges emerge when multicultural and global perspectives emerge in ethical decision-making. The authors suggest that these changes in culture allow for more fluid rules in decision-making. The organization should take responsibility by training its leaders to develop sensitivity towards cultures and ultimately allow decisions with values respected but with the required maintenance of ethics.

Clegg et al. (2007) discuss how organizational power relationships influence ethical decision-making. This study indicates that individuals experience moral dilemmas because, at times, organizational objectives are at variance with ethical ideals. To solve this problem, Clegg (2007) suggests having a system that incorporates openness and accountability so that one can guarantee no recriminations for speaking about ethical issues. In this sense, this philosophy asserts that an organization should have the values of integrity and promote free speech during decision-making.

MacDonald's (2015) model incorporates ethics into the decision-making criteria by incorporating normative theories of deontology and utilitarianism concerning business. He then creates a structured, sequenced process through which the leaders can decide and painstakingly measure it against the harm and reasonableness it may bring. His model further captures the ethical aspects of the decision-making process. This model is invaluable for an organization or company looking to establish the areas of ethics that need to become part of the corporation.

Boyles (2023) also touches on how technology has changed ways of thinking around ethics, creating many of these modern areas of challenge to ethical decision-making. He feels this ethical decision-making becomes incredibly complicated in the digital space, especially concerning data protection and AI. Boyles (2023) would promote a flexible framework that, though fluidly changed by the changing times in technology, would provide businesses with a certain kind of roadmap through which to take new ethical challenges yet remain transparent and accountable.

The scholars discussed insist on elaborating flexible but structured approaches to ethical decision-making in organizations, taking into consideration organizational, cultural, and technological contexts. From their insights, one may understand the need for clearly defined frameworks, encouragement of ethics-related discourses, and relentless dedication to integrity in guiding leaders to make decisions that balance the organization's interests with those of ethical imperatives.

The scholars have focused on the stakeholder view (5 articles) and business processes (4 articles) and generally called for a "balanced view"(3 articles) on the secondary attribute. Other attributes include universal ethics (1), consumer well-being (1), and family values (1). The journal article "Corporate Social Responsibility: A Three-Domain Approach" was written by Schwartz and Carroll and was featured in the Business Ethics Quarterly journal. Often featured in the Journal of Business Ethics, the journal develops the dynamics of CSR and business ethics and can be described as that approach wherein business adheres to minimum levels of ethical performance and contributes positively to the attainment of significant social objectives such as sustainability and the stakeholder environment.

Definition

With these most often mentioned commonalities of the scholarly definitions of Business Ethics in mind, the following definition is proposed:

Business Ethics can be defined as the moral course of conduct that steers decision-making processes in organizations whenever confronted with moral dilemmas and competing interests. Ethical business decisions need to consider the immediate consequences and their long-term effects on all stakeholders: customers, employees, shareholders, and communities. The ethical organization acts in an alterocentric fashion. It infuses transparency, equity, and accountability in its structure so that business operations - from resource allocation to corporate governance align in an integrative approach with social responsibility, stakeholder welfare, and sustainability outcomes.

German Definition: Die Geschäftsethik kann als moralischer Verhaltenskodex definiert werden, der Entscheidungsprozesse in Organisationen lenkt, wenn diese mit moralischen Dilemmata und konkurrierenden Interessen konfrontiert sind. Ethische Geschäftsentscheidungen müssen sowohl die unmittelbaren Folgen als auch die langfristigen Auswirkungen auf alle Stakeholder berücksichtigen: Kunden, Mitarbeiter, Aktionäre und Gemeinschaften. Die ethische Organisation handelt alterozentrisch. Sie integriert Transparenz, Gerechtigkeit und Verantwortlichkeit in ihre Struktur, sodass Geschäftsabläufe – von der Ressourcenverteilung bis zur Unternehmensführung – in einem integrativen Ansatz mit sozialer Verantwortung, dem Wohlergehen der Stakeholder und nachhaltigen Ergebnissen übereinstimmen.

Chinese Definition: 商业道德可以定义为一种道德行为准则，在组织面临道德困境和利益冲突时，引导其决策过程。道德商业决策需要考虑直接后果以及对所有利益相关者的长期影响：客户、员工、股东和社区。道德的组织以他人为中心行事。在其结构中注入透明性、公平性和问责制，使从资源分配到公司治理的商业运营都以社会责任、利益相关者福祉和可持续性成果为导向，采取整体性方法。

After providing this definition, it will be discussed in depth in the following paragraphs.

Discussion

These four big concepts of business ethics—broader Moral Concepts, Organizational Structures, Moral Dilemmas, and Ethical Decisions—address essential elements concerning integrating ethics into business practice. Together, they create a broad ethical framework that may help an organization achieve moral integrity and social responsibility.

Broader Moral Ideas

More significant moral concepts of business ethics, as initially postulated by Drucker (1981) and later supported by Bhargava and Velasquez (2021), reflect that ethical principles should be universally applied and wholly embedded within all aspects of organizational behavior. By correspondence, Drucker's (1981) contention that business ethics corresponds with public ethics implies that businesses must be based on the same morality for all individuals within society. Bhargava and Velasquez (2021) further expand this to critique how the attention economy might exploit users' attention, whereas ethical business practices should do no harm and respect their autonomy. The more general moral concepts here signal that businesses have a moral obligation not only to their shareholders but to society itself, thus establishing a minimum ethical threshold irrespective of profitability considerations.

Organizational Structures

Jackson (1996) and Dacin et al. (2022) stressed the need for ethics placement within an organization's structure. Jackson pointed out that organizations should not simply apply ethics superficially but, instead, at the core of their structures in influencing decision-making and behavioral outcomes at every level. Dacin et al. extend this further to argue that organization structures should facilitate stakeholder-oriented governance through which profit is aligned with ethics. They say it will incorporate a culture of accountability and transparency if an organization embraces ethics into its structures. The structural approach to ethics ensures that ethics consideration is attached uniformly to all activities, strengthening the morals in all aspects of an organization.

Moral Dilemmas

According to DeTienne et al. (2018), Hermann (2021), Cohen (2010), and Bogdanich/Forsythe (2022), moral dilemmas are those issues arising because values come in conflict with each other. The most evident example is profit versus social responsibility. DeTienne et al. maintain that these dilemmas are often magnified due to the differences in the stakeholders' interests and, therefore, urge the creation of an environment that would foster ethical debate. Hermann's research on AI usage in corporate marketing adds a contemporary perspective: It shows how technological developments can introduce new moral dilemmas, especially regarding privacy and autonomy in consumer interactions. Addressing moral dilemmas requires organizations to establish clear ethical guidelines and encourage open communication, enabling individuals to navigate complex situations with integrity.

Decision Making

Business ethics decisions, as conceptualized by such authors as Courtney (2001) and Boyles (2023), anchor essentially on one systemic conceptualized approach to making ethical decisions. Courtney (2001) considers a call for joining analytic reasoning with ethical foresight, especially in contexts depicted by uncertainty. Boyles (2023) described how modern challenges imposed by digital and AI technologies call for one quintessential ability of the ethical framework to adapt to new ethical dilemmas. While Moberg (2006) and Clegg et al. (2007) emphasize the need to embed the process of ethical decision-making with elements of personal integrity coupled with organizationally based values, Clegg et al. (2007) have placed particular emphasis on the role of power relationships in shaping decisions about ethics. This set of authors reveals that ethical decision-making should be considered an active and circular process considering long-term impacts on all stakeholders.

Conclusion

Broad moral concept analysis, organizational structures, moral dilemmas, and ethical decision-making give a multi-dimensional approach to business ethics in structural and individual responsibilities. All these concepts together form an integrated approach toward ethics in business, wherein principles are not just espoused but deeply entrenched within the core of organizational practice. Therefore, ethical business practice is more than compliance; it is about creating spaces where ethics cease to be an option and become an ingrained habit. Embedding ethics in decision-making and organizational structuring, as well as ways to overcome moral obstacles, therefore, supports resilience in meeting today's challenges, such as data privacy in the digital world and global issues related to corporate social responsibility.

In practice, organizations operating within these frameworks are better positioned: They enjoy higher trust, greater accountability, and lasting sustainability in ways that make their business goals congruent with the greater good of society. As the business world continues to change due to technological advances, these basic concepts of ethics may provide a starting point for organizations to find solutions to new problems. At the same time, companies can maintain profitability.

Limitations and future research ideas

Limitations to the current business ethics frameworks underline the call for more adaptive and context-sensitive research methodologies that meet the demands of the emerging landscapes of modern business. The result of this constant investigation can ensure that realistic, resilient, and practical ethical practices are held within an environment of rapid change.

Broader Ethical Principles

While both Drucker and Bhargava's models support broad-based ethics in business, the application is ideal for realistic operations. The broader moral guidelines, such as the equivalence of business ethics to personal ethics, may be at odds with global markets' complicatedness and competitive nature. General ethics such as "no harm" are easily not quantifiable and policed - subjective interpretation may depend on different situations and cultural contexts. This is well-perceived criticism by Bhargava; though he targets pressing issues such as digital addiction, the more significant challenge relates to how business activities are legally and culturally regulated. Future research could be more oriented toward devising concrete measures and parameters to explain how businesses from different industries and regions could better adhere to higher moral values.

Organizational Structures

Following Jackson and Dacin et al., one problem with the imbuement of ethics within organizational structures is the assumption of the homogeneity of values and principles within parts of an organization and between different individuals. Different employees may bring different ethical backgrounds and perspectives, and harmonizing these within one organizational structure is challenging. Another issue is that power precepts and organizational pressure can easily infiltrate ethical structures to yield profit. Dacin et al. refer to the tension between stakeholder-focused structures and profit-governing motives. Still, more research is needed concerning how ethical frameworks might be accommodated within organizations, which often override financial performance. Future research may test flexible ethical models that consider the balance of power and investigate how organizational cultures can change ethically without sacrificing competitive objectives.

Author Contact Information

Correspondence regarding this article should be directed to B. Schemmel at burkard.schemmel@student.eim.education.

Conflict of (Competing) Interest

The authors declare that they have no (competing) financial or non-financial interests related to this study. The authors are the founders and CEOs of the Altrocentric Business Ethics Foundation and consulting firm.

Funding

The authors self-funded the research, and no external funding was obtained for its completion.

Author Contributions

B. Schemmel conceptualized the study, collected and analyzed the data, and drafted the manuscript; K. Bredemeier provided critical revisions.

Acknowledgments

The authors gratefully acknowledge Michael Neubert for his invaluable inspiration in conceptualizing this article, his contributions to developing its structure and methodology, and his critical revisions and support in preparing it for publication.

Data Availability and Supplementary Material

All data generated and analyzed during this study and supplementary material are available upon reasonable request.

Prior Publication

The authors confirm that this research has not been published previously and is not under consideration for publication elsewhere.

Ethics Statement

This study complies with the ethical guidelines of the European Code of Conduct for Research Integrity and adheres to the GDPR requirements for data protection. Ethical approval was obtained from the Institutional Review Board of EIM, and informed consent was secured from all participants.

Responsible AI Ethics Statement

In this study, artificial intelligence (AI) tools were used to support tasks such as identifying relevant literature, analyzing datasets, and editing textual content. These tools were employed solely to enhance efficiency, and their outputs were critically reviewed to ensure alignment with research objectives. The use of AI adhered to ethical principles outlined in the EU AI Act, the OECD AI Principles, and the UNESCO Recommendation on the Ethics of Artificial Intelligence, emphasizing transparency, fairness, and accountability. All final decisions were made by the authors, who retain full responsibility for this research's integrity, rigor, and conclusions.

Moral Dilemmas

Discussing moral dilemmas in business ethics, such as that by DeTienne et al. and Hermann, often need more actual means for resolving competing stakeholder interests when they represent conflicting priorities. Companies may create ethical policies but then feel forced to weigh these against budgetary and functional concerns, leading them to make choices that are antithetical to ethical premises. Besides, the ethical issues new technologies have brought about, such as AI and personal data protection, take time to fit into classic ethical frames. Research may be directed to decision-making tools that weigh ethical considerations against business outcomes or the use of emerging technologies in creating and solving moral dilemmas.

Decision Making

Ethical decision-making models, like those advanced by Courtney (2001) and Boyles (2023), are more formalized but need more flexibility in the fast-moving field of IT. Many of these decision-making frameworks rely on fixed principles, which cannot apply effectively to the dynamic ethical issues that globalization and digitalization raise. Extensive data and artificial intelligence raise many ethical considerations that more classic decision-making models handle poorly, not least user privacy issues and algorithmic bias. Further studies might seek to develop adaptive models of decision-making based on real-time data, incorporating ethics in AI to make quicker and more contextual ethical judgments.

Call for Further Academic Studies

Developing Contextualized Ethical Standards

Given the challenges of implementing universal ethics, future studies could focus on forming sector-specific ethics that offer more definable practices suitable for given sectors. This would safeguard against vast moral constructs by creating tailored ethical regimes better suited for many business contexts.

Cross-Cultural Models for Ethics

As globalization expands, the various ethical requirements for multinational organizations in different regions become increasingly broad. The research could focus on cross-cultural models in organizational structures that allow elasticity in ethics while maintaining the core. Understanding the perception and implementation of ethics in different cultures can support flexibility in organizational structures.

Moral Dilemmas and Emerging Technologies

As technology unfolds, so do new moral dilemmas, specifically AI, data privacy, and automation. Researchers will have to consider the development of methodologies that would help apply given ethical frameworks to consider the influence of AI, data privacy, and automation.

Adaptive Ethical Decision-Making Models

Further research may extend decision-making models based on predictive analytics, complemented with real-time feedback, which could enable leaders to make wiser ethical choices in fast-paced environments. Studies can also delve into embedding ethical decision-making into automated systems so that decisions made through artificial intelligence align with an organization's ethics.

References

Banerjee, S. B. (2008). Corporate social responsibility: The good, the bad, and the ugly. *Critical Sociology, 34*(1), 51–79.

Bartlett, D. (2003). Management and business ethics: A critique and integration of ethical decision-making models. *British Journal of Management, 14*(3), 223–235.

Benevene, P., Dal Corso, L., De Carlo, A., Falco, A., Carluccio, F., & Vecina, M. L. (2018). Ethical leadership as antecedent of job satisfaction, affective organizational commitment, and intention to stay among volunteers of non-profit organizations. *Frontiers in psychology, 9*, 2069.https://doi.org/10.3389/fpsyg.2018.02069

Berger, P. L., & Luckmann, T. (1966). *The social construction of reality: A treatise in the sociology of knowledge.* Penguin.

Bhargava, V. R., & Velasquez, M. (2021). Ethics of the attention economy: The problem of social media addiction. *Business Ethics Quarterly, 31*(3), 321-359. https://doi.org/10.1017/beq.2020.32

Bogdanich, W., & Forsythe, M. (2022). *When McKinsey comes to town: The hidden influence of the world's most powerful consulting firm.* Anchor.

Bowie, N. E. (2002). A Kantian approach to business ethics. *Ethical Theory and Business, 4*(2), 99–117.

Bowie, N. E., & Beauchamp, T. (1979). *Ethical theory and business.* Prentice-Hall.

Boyles, M. (2023, July 27). *What are business ethics & why are they important?* https://online.hbs.edu/blog/post/business-ethics

Bredemeier, K. (2019). *Die Kunst der klaren Kommunikation: 250 professionelle Rhetorik-Tipps (Vol. 329)*. Haufe-Lexware.

Bredemeier, K. (2024). *Alterozentrierung*. Retrieved November 7, 2024, from www.dr-bredemeier.de

Bregman, R. (2019). *De meeste mensen deugen: een nieuwe geschiedenis van de mens.* De Correspondent.

Carnegie, A. (1962). *The gospel of wealth and other timely essays.* Harvard University Press.

Chakrabarty, S., & Bass, A. E. (2014). Institutionalizing ethics in institutional voids: Building positive ethical strength to serve women microfinance borrowers in negative contexts. *Journal of Business Ethics, 119*(4), 529–542.

Cicero. (44 BCE). De Officiis.

Clegg, S., Kornberger, M., & Rhodes, C. (2007). Business ethics as practice. *British Journal of Management, 18*(2), 107-122.

Cominetti, M., & Seele, P. (2016). Hard soft law or soft hard law? A content analysis of CSR guidelines typologized along hybrid legal status. *Umwelt Wirtschafts Forum, 24*(2), 127–140.

Courtney, H. (2001). Making the most of uncertainty. *The McKinsey Quarterly*, 38–38.

Crane, A., Matten, D., Glozer, S., & Spence, L. J. (2019). *Business ethics: Managing corporate citizenship and sustainability in the age of globalization.* Oxford University Press, USA.

Dacin, M. T., Harrison, J. S., Hess, D., Killian, S., & Roloff, J. (2022). Business versus ethics? Thoughts on the future of business ethics. *Journal of Business Ethics, 180*(3), 863–877. https://doi.org/10.1007/s10551-022-05241-8

Dewey, J. (1938). *Logic: The theory of inquiry.* Holt, Rinehart, and Winston.

DeTienne, K. B., Agle, B. R., Phillips, J. C., & Ingerson, M. C. (2018). The impact of moral stress compared to other stressors on employee fatigue, job satisfaction, and turnover: An ethical perspective. *Journal of Business Ethics, 152*(3), 625-640.

Dierksmeier, C. (2020). From Jensen to Jensen: Mechanistic management education or humanistic management learning? *Journal of Business Ethics, 166*(1), 73-87.

Donaldson, T. (1996). Values in tension: Ethics away from home. *Harvard Business Review, 74*(5), 48–62.

Donaldson, T., & Dunfee, T. W. (1999). *Ties that bind: A social contracts approach to business ethics*. Harvard Business School Press.

Drucker, P. F. (1981). What is business ethics? *The Public Interest, 63*(2), 18-36.

Foucault, M. (1980). *Power/knowledge: Selected interviews and other writings, 1972-1977.* Pantheon.

Frederick, W. C. (1960). The growing concern over business responsibility. *California Management Review, 2*(4), 54–61.

Freeman, R. E. (2010). *Strategic management: A stakeholder approach*. Cambridge University Press.

Gond, J. P., & others. (2020). The future of business ethics: Where next? *Journal of Business Ethics, 162*, 3–24.

Halkias, D., & Neubert, M. (2020). Extension of Theory in Leadership and Management Studies Using the Multiple Case Study Design. *International Leadership Journal, 12*(2), 48–73. https://doi.org/10.2139/ssrn.3586256

Halkias, D., Neubert, M., & Harkiolakis, N. (2023). Multiple Case Study Data Analysis for Doctoral Researchers in Management and Leadership. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.4423757

Hearn, J., Hall, M., Lewis, R., & Niemistö, C. (2023). The spread of digital intimate partner violence: Ethical challenges for business, workplaces, employers and management. *Journal of Business Ethics, 187*(4), 695-711.

Hermann, E. (2021). Leveraging artificial intelligence in marketing for social good—An ethical perspective. *Journal of Business Ethics, 179*(1), 43–61. https://doi.org/10.1007/s10551-021-04843-y

Hobsbawm, E. (1962). *The age of revolution: Europe 1789–1848.*

Jackson, K. T. (1996). Business ethics and corporate philanthropy. *Journal of Business Ethics, 15*(1), 75–85.

Jose, A., & Thibodeaux, M. S. (1999). Institutionalization of ethics: The perspective of managers. *Journal of Business Ethics, 22*(2), 133–143.

Kant, I. (1998). *Groundwork of the metaphysics of morals.* Cambridge University Press.

Lama, D. (2015). *Der Appell des Dalai Lama an die Welt: Ethik ist wichtiger als Religion.* Benevento.

Lay, R. (1998). *Weisheit für Unweise.* Econ-Verlag.

Lippke, R. L. (1991). A critique of business ethics. *Business Ethics Quarterly, 1*(4), 367–384.

Lütge, C. (2019). *There is not enough business ethics in the ethics of digitization*. In Ethical business leadership in troubled times (pp. 280–295). Edward Elgar Publishing.

Markkula Center for Applied Ethics. (n.d.). *A history of business ethics.* Retrieved from Santa Clara University's Markkula Center for Applied Ethics website.

MacAskill, W. (2016). *Gutes besser tun: Wie wir mit effektivem Altruismus die Welt verändern können.* Ullstein Ebooks.

Mill, J. S. (1863). *Utilitarianism.* London: Parker, Son, and Bourn. West Strand.

Moberg, D., & Caldwell, D. F. (2007). An exploratory investigation of the effect of ethical culture in activating moral imagination. *Journal of Business Ethics, 73*, 193–204.

Neubert, M. (2022). A Systematic Literature Review about the Speed of Internationalization. International Journal of Business and Management, 17(2), 80-111. https://doi.org/10.5539/ijbm.v17n2p80

Neubert, M. (2022). A Systematic Literature Review of Dynamic Pricing Strategies. International Business Research, 15(4), 1–17. https://doi.org/10.5539/ibr.v15n4p1

Oakley, B., Knafo, A., Madhavan, G., & Wilson, D. S. (Eds.). (2011). Pathological altruism. Oxford University Press.

Orts, E. W., & Strudler, A. (2009). Putting a stake in stakeholder theory. *Journal of Business Ethics, 88*(4), 605–615.

Poff, D. C., & Michalos, A. C. (2013). Citation classics from the Journal of Business Ethics. Springer.

Prasad, A., & Mills, A. J. (2010). Critical management studies and business ethics: A synthesis and three research trajectories for the coming decade. *Journal of Business Ethics, 94*(2), 227–237.

Ricard, M. (2013). Plaidoyer pour l'altruisme: la force de la bienveillance. Nil.

Rockness, H., & Rockness, J. (2005). Legislated ethics: From Enron to Sarbanes-Oxley, the impact on corporate America. *Journal of Business Ethics, 57*(1), 31–54.

Rossouw, D., & Van Vuuren, L. (2013). Institutionalizing ethics. In Business ethics (5th ed., pp. 273–289). Oxford University Press.

Schaefer, S., Ashu, F., & Neubert, M. (2021). The impact of GDP and governance on venture capital investments for 2010-2019 (after the financial crisis and before the Covid-19 pandemic). *International Journal of Teaching and Case Studies, 12*(3), 219-232. https://doi.org/10.1504/IJTCS.2021.117967

Singer, Pbest The most good you can do: How effective altruism is changing ideas about living —textually—Text Publishing.

Solomon, R. C. (1992). Ethics and excellence: Cooperation and integrity in business.

Wahler, F., & Neubert, M. (2023). A scientific definition of explainable artificial intelligence for decision making. *International Journal of Teaching and Case Studies, 14*(1), 88-116. https://doi.org/10.1504/IJTCS.2023.131664

Windsor, D. (2006). Corporate social responsibility: Three key approaches. *Journal of Management Studies, 43*(1), 93–114.

Appendix

Table 2: Definitions of the term "Business Ethics," sources, and semantic analysis

Level	Definition	Authors	Year	Source	
I	In Peter F. Drucker's article "What is Business Ethics?" (1981), he critically examines the concept of business ethics, arguing that it often becomes politicized and diverges from genuine ethical principles. Drucker believes that business ethics should not be a specialized form of ethics designed to serve corporate interests but rather should adhere to the same moral standards that apply to all individuals and entities critiques the idea that business ethics should be treated as a separate moral category, distinct from ethics in other fields. He asserts that many proponents of business ethics are engaged in what he calls "casuistry," or the manipulation of ethical standards to justify actions that would otherwise be deemed unethical if performed by non-business entities. Drucker emphasizes that ethics, whether in business or personal life, should remain universal and not be twisted to serve specific interests under the guise of social responsibility. He argues against the idea that businesses have different ethical obligations than individuals and warns that the misuse of "business ethics" can allow executives to rationalize unethical decisions, presenting them as socially responsible actions. National Affairs.	Peter F. Drucker	(1981).	McKinsey	
I	Jackson (1996) describes business ethics as the ethical principles governing an organization's actions regarding stakeholders, employees, and the environment. This view frames business ethics as part of the broader social contract between businesses and society.	Jackson	1996	Springer Link	

	Type	Page	CitiEthics	citing Year	Business Ethic Hit in title	Hit in title and/or text	Objekt	Attributes	Comprises /Involves
	Peer Reviewed Article				1	1	Broader Moral Concepts	Universal Ethics	
	Book	29			1	1	Organizational Structure	StakViewer Vview	Societal Impact

Level	Definition	Authors	Year	Source	
II	The most important message the participants should receive is that the level of complexity of BE (Business Ethics) issues is so high that it requires the involvement of key stakeholders that there are no simple. Even if there is a "right answer," it will be very much dependent on the interests of a particular stakeholder group. In other words, the emphasis is not on finding the "right answer" but on developing the capacity to address complex more effectively and systematically.	James F. Courtney	(2001).	Elsevier	
I	In the article "Corporate Social Responsibility: A Three-Domain Approach. Business Ethics Quarterly" Schwartz and Correlation analyzes the correlation between CSR and Business Ethics. The Journal of Business Ethics often emphasizes the overlap between corporate social responsibility (CSR) and business ethics. It describes it as an integrated approach that complies with standards and actively contributes to societal goals, such as sustainability and stakeholder well-being.	Schwartz & Carroll	2003	JSTOR	
I	In the article "Practical Wisdom,m ss Ethics" by Dennis J. Moberg in 2006, business ethics are taught through practical wisdom. Moberg defines business ethics as adherence to rules or guidelines and the ability to make morally excellent decisions in specific, often complex, situations. Practical wisdom, or phronesis, involves the combination of knowledge, emotion, critical thinking, and motivation to craft well-suited to each situation's unique challenges each situation. This perspective emphasizes the role of context and the need for morally astute judgment in navigating ethical dilemmas within businesses.	Dennis J. Moberg	(2006).	Business Ethics Quarterly	
I	Clegg et al. (2007) conceptualize business ethics as a practice by emphasizing that ethics in organizations emerge from ongoing, everyday interactions and decisions. Rather than being a set of abstract principles, business ethics are used in debate, contestation, and decision-making within specific contexts. This perspective focuses on how ethical decisions are made in the unpredictable and often ambiguous environments that managers face, highlighting the role of ethical practices in navigating moral dilemmas and balancing competing interests within organizations.	Clegg et al.	2007	British Journal of Management	
II	In "The Corporate Ethical Virtues (CEV) Model," Muel Kaptein defines a business organization's ability to foster an ethical culture through specific virtues that encourage ethical behavior. These virtues include clarity, congruency (of both supervisors and management), feasibility, supportability, transparency, discussability, and sanctionability. Conditions that promote ethical conduct within organizations by ensuring that employees are aware of, capable of, and motivated to meet ethical standards.	Kaptein	2008	Wiley	
III	“ethics” in corporate governance refers to company policy and procedures relating to business operations.	Khalid	2014	European Journal of Business and Management	
I	Business ethics refers to the application of ethical norms to business conduct. This includes reflecting on the societal impact of business operations and balancing profit motives with ethical responsibilities.	MacDonald	2015	Springer Link	
I	In other research, business ethics has been positioned as a system of ethical frameworks integrated into organizational culture. It extends beyond individual decision-making to encompass collective processes that shape corporate behavior and responsibility.	Greenwood	2016	Springer Link	

	Type	*Page*	*CitiEthics*	*citing Year*	*Business Ethic Hit in title*	*Hit in title and/or text*	*Objekt*	*Attributes*	*Comprises /Involves*
	Peer Reviewed Article	21	WBCSD	2001	0	1	Decision Making	Stakeholder View	
	Peer Reviewed Article	508			0	1	Corporate Social Responsibility	Stakeholder View	Societal Impact
	Peer Reviewed Article				1	1	Decision Making	Balanced View	Morale Principles
	Peer Reviewed Article				1	1	Decision Making	Business Processes	Morale Principles
	Peer Reviewed Article	101	Treviño & Weaver	2003	1	1	Ethical Frameworks	Corporate Culture	Behavior and Responsibility
	Peer Reviewed Article	52			0	1	Ethical Frameworks		
	Book	4			1	1	Decision Making	Balanced View	Societal Impact
	Peer Reviewed Article	65			1	1	Ethical Frameworks	Stakeholder View	Behavior and Responsibility

Level	Definition	Authors	Year	Source	
III	Ethical leadership capacity allows the leader to consistently make decisions and act in accordance with significant moral principles, standards, rds, and responsibilities. It also gives the leader the authority to foster such capacity for decision-making and behavior in subordinates.	Benevene et al.	2018	Frontiers in Psychology	
I	"The ABC's of Business Ethics: Definitions, Philosophies, and Implementation" defines applying ethical principles to business conduct, decision-making, and strategies. It emphasizes that business ethics is not just about following legal standards but involves a broader moral responsibility to stakeholders, including employees and custom society. The article outlines the philosophical underpinnings of business ethics, drawing on various ethical theories like utilitarianism, deontology, and virtue ethics to explain how businesses can navigate moral dilemmas in a way that goes beyond mere compliance with the law.	Wiley, C.	(2018).	Springer Link	
I	In the article "Family Business Ethics: At the Crossroads of Business Ethics and Family Business" by Pedro Vazquez (2018), business ethics is defined as a field that intersects with the unique characteristics of family-owned firms. The ethical concerns in family businesses are influenced by their distinctive relationships, stakeholders, and practices, making them different from non-family businesses. Vazquez argues that family firms face specific ethical issues due to their intertwined personal and business dynamics, such as inheritance dilemmas, family values, and social responsibilities. The study highlights that research on family business ethics still needs to be developed, urging more focus on how ethics plays a role in these unique organizational structures.	Pedro Vazquez	(2018).	Journal of Business Ethics	
I	In "Business Ethics," Jacqueline Boaks discusses business ethics within leadership and virtue ethics. The authors define business ethics as the application of ethical principles to leadership practices, emphasizing the moral responsibility of leaders to guide organizations in a way that promotes both ethical conduct and effective governance. They argue that leadership is inherently tied to ethical considerations, and without a strong ethical foundation, leadership could devolve into mere exertion of power or influence. Boaks mainly articulately draws on Aristotelian virtue ethics, suggesting that ethical leadership is not just about wing rules but about cultivating virtuous qualities such as integrity, fairness, and courage, which guide decision-making and influence corporate culture. Their view challenges simplistic notions of compliance-based ethics, advocating for a deeper integration of moral philosophy into business practices. This approach highlights that proper business ethics involves nurturing ethical character and values throughout the organization, ensuring long-term positive outcomes for businesses and society.	Boaks et al	(2018).	Bloomsbury Publishing	
II	In the article "Ethics of the Attention Economy: The Problem of Social Media Addiction" by Vikram Bhargava and Manuel Velasquez (2021), business ethics is framed through the lens of social media companies' responsibilities. The authors argue that the attention, mainly through social media addiction, raises unique ethical concerns. Business ethics in this context is defined as addressing the moral wrongs of intentionally addicting users to platforms. The authors critique the attention-economy model that incentivizes companies to exploit users by creating addictive experiences, which leads to harmful consequences such as decreased well-being and exploitation. They emphasize that business ethics involves recognizing and adding harms and the inherent exploitation in leveraging psychological vulnerabilities for profit.	Vikram Bhargava and Manuel Velasquez	2021	Business Ethics Quarterly	

	Type	Page	CitiEthics	citing Year	Business Ethic Hit in title	Hit in title and/or text	Objekt	Attributes	Comprises /Involves
	Peer Reviewed Article	52			0	1	Decision Making		
	Peer Reviewed Article		Wiley	1995	1	1	Morale Dilemm as	Stakeholder View	
	Peer Reviewed Article				1	1	Relation s Family	amiliy Values	Societal Impa,ct
	Book				0	1	Virtue Ethics	Business Processes	Morale Principles
	Peer Reviewed Article				0	1	Broade WeWell beingts	Customer Well- being	Profit-Orientation

Level	Definition	Authors	Year	Source	
I	Business ethics studies the ethical dimensions of exchanging goods and services and the entities that offer goods and services for exchange. This includes related activities such as the production, distribution, marketing, sale, and consumption of goods and services.	Moriarty	2021	Stanford University	
I	In the article "Leveraging Artificial Intelligence in Marketing for Social Good—An Ethical Perspective," business ethics is framed through the challenges and opportunities of AI usage in marketing. Business ethics in this context involves addressing the moral dilemmas and ethical considerations related to AI deployment. This includes ensuring fairness, transparency, and accountability in dking processes, safeguarding consumer privacy, and avoiding manipulative practices. The ethical perspective aims to balance innovation with societal responsibility, ensuring AI is used to benefit both businesses and society.	Erik Hermann	(2021).	Journal of Business Ethics	
I	Broadly defined, business ethics focuses on “the study of business situations, activities, and decisions where issues of right and wrong are addressed.”	Schultz, S.	(2022).	Springer Link	
I	The article challenges the notion that ethics is merely about legal compliance and promotes a broad understanding of ethical considerations inherent in business models and corporate governance. This perspective moves beyond a simplistic view of business ethics as rules. Ethical behavior should be deeply embedded within organizational structures and strategies, ensuring that businesses operate for profit and societal good.	Cin et al	(2022).	Journal of Business Ethics	
I	Harvard Business School offers a more practical definition, emphasizing business ethics as the principles guiding decision-making in complex situations where the distinction between right and wrong is only sometimes evident. This includes considering the externalities of business decisions, both positive and negative, and how to maximize positive outcomes while minimizing harm.	Boyles	2023	Harward Business School Online	

 DOI 10.2440/013-0003

	Type	***Page***	***CitiEthics***	***citing Year***	***Business Ethic Hit in title***	***Hit in title and/or text***	***Objekt***	***Attributes***	***Comprises /Involves***
	Book	1	Donaldson & Walsh	2015	1	1	Exchange Theory	Business Processes	
	Peer Reviewed Article	1			0	1	Morale Dilemmas	Balanced View	Societal Impact
	Peer Reviewed Article	1	Crane, A., Matten, D	2016	1	1	Decision Making	human discourse	Ethics Washing
	Peer Reviewed Article				1	1	Organizational Structure	Business Processes	Societal Impact
	Peer Reviewed Article				1	1	Decision Making	Stakeholder View	Positive Outcomes

Patient Expectations and Reality in Aesthetic Medicine – Systematic Literature Review

Ameni Aloui
European Institute of Management, EIM, Valletta, Malta

Abstract

This systematic literature review examines the complex relationship between patient expectations and realistic outcomes in aesthetic medicine. Driven by the growing prevalence of social media trends and shifting beauty ideals, the demand for aesthetic treatments has significantly increased in recent years. The analyzed studies address psychosocial and ethical dimensions, highlighting key themes such as the influence of social media platforms such as TikTok, Instagram, or FaceBook, which promote unrealistic beauty standards and foster exaggerated and often unattainable patient expectations. Practitioners usually feel pressured to fulfill patient requests that conflict with their clinical safety standards or own professional judgment, leading to ethical challenges. This article demonstrates that transparent communication, evidence-based decisions, and practitioner trust often drive patient satisfaction. Generational differences reveal that social media influences younger patients and aspire to cosmetic perfection, whereas older patients prioritize natural results and safety. A significant research gap exists in examining the long-term psychosocial effects of aesthetic procedures on patients' mental health, self-esteem, and social wellbeing. The need for personalized communication strategies is shown to address these unrealistic expectations effectively. Future research could analyze the impact of social media on patient decision-making, cultural differences driving expectations, and the development of evidence-based communication models. This systematic literature review underscores the importance of an interdisciplinary approach that integrates ethical, psychosocial, and clinical perspectives to bridge the gap between patient expectations and realistic outcomes while promoting sustainable and patient-centered practices in aesthetic medicine.

#Keywords

Aesthetic Medicine, Patient Expectations, Realistic Outcomes, Social Media Influence, Instagram and TikTok, Unrealistic Beauty Standards, Psychosocial Dimensions, Ethical Challenges, Generational Differences, Patient Satisfaction, Evidence-Based Communication, Mental Health, Self-Esteem, Long-Term Effects, Digital Media and Decision-Making, Cultural Differences, Patient-Centered Practices, Sustainable Aesthetic Medicine, Communication Strategies.

doi: 10.2440/013-0004

Erwartungshaltungen von Patient:innen und deren Abgleich mit der Realität in der ästhetischen Medizin – Eine systematische Literaturübersicht

Diese systematische Literaturübersicht untersucht die komplexe Beziehung zwischen den Erwartungen von Patienten und realistischen Ergebnissen in der ästhetischen Medizin. Getrieben durch die zunehmende Verbreitung von Social-Media-Trends und sich wandelnde Schönheitsideale hat die Nachfrage nach ästhetischen Behandlungen in den letzten Jahren erheblich zugenommen. Die analysierten Studien beleuchten psychosoziale und ethische Dimensionen, wobei zentrale Themen wie der Einfluss von Social-Media-Plattformen wie TikTok, Instagram oder Facebook hervorgehoben werden, die unrealistische Schönheitsstandards fördern und überhöhte sowie oft unerreichbare Erwartungen bei den Patienten schüren. Ärzte fühlen sich häufig unter Druck gesetzt, Patientenwünsche zu erfüllen, die mit ihren klinischen Sicherheitsstandards oder ihrem eigenen professionellen Urteil in Konflikt stehen, was zu ethischen Herausforderungen führt. Dieser Artikel zeigt auf, dass transparente Kommunikation, evidenzbasierte Entscheidungen und das Vertrauen in die Fachkompetenz der Ärzte entscheidende Faktoren für die Zufriedenheit der Patienten sind. Generationsunterschiede zeigen, dass Social Media jüngere Patienten stärker beeinflusst, die nach kosmetischer Perfektion streben, während ältere Patienten natürliche Ergebnisse und Sicherheit priorisieren. Ein signifikanter Forschungsbedarf besteht in der Untersuchung der langfristigen psychosozialen Auswirkungen ästhetischer Eingriffe auf die psychische Gesundheit, das Selbstwertgefühl und das soziale Wohlbefinden der Patienten. Die Notwendigkeit personalisierter Kommunikationsstrategien wird hervorgehoben, um diesen unrealistischen Erwartungen wirksam zu begegnen. Zukünftige Forschung könnte den Einfluss von Social Media auf die Entscheidungsfindung der Patienten, kulturelle Unterschiede als Treiber von Erwartungen sowie die Entwicklung evidenzbasierter Kommunikationsmodelle analysieren. Diese systematische Literaturübersicht unterstreicht die Bedeutung eines interdisziplinären Ansatzes, der ethische, psychosoziale und klinische Perspektiven integriert, um die Kluft zwischen Patientenerwartungen und realistischen Ergebnissen zu überbrücken und gleichzeitig nachhaltige sowie patientenzentrierte Praktiken in der ästhetischen Medizin zu fördern.

美容医学中患者期望与现实的系统性文献综述

本系统文献综述探讨了患者期望与审美医学中现实结果之间的复杂关系。受社交媒体趋势和不断变化的审美标准影响，近年来对审美治疗的需求显著增加。分析的研究聚焦于心理社会和伦理层面，强调了如TikTok、Instagram和FaceBook等社交媒体平台的影响，这些平台推广不切实际的美学标准，导致患者产生夸大且难以实现的期望。临床医生常因患者要求与其临床安全标准或专业判断相冲突而感到压力，从而面临伦理挑战。研究表明，透明的沟通、基于证据的决策以及患者对医生的信任往往是患者满意的关键驱动因素。代际差异显示，年轻患者受到社交媒体的显著影响，更倾向于追求美容上的完美，而年长患者则更注重自然效果和安全性。在审美治疗对患者心理健康、自尊和社会福祉的长期心理社会影响方面，研究仍存在显著空白。个性化沟通策略被认为是有效应对这些不现实期望的关键。未来研究可探讨社交媒体对患者决策的影响、文化差异对期望的驱动作用以及基于证据的沟通模型的开发。本系统文献综述强调了整合伦理、心理社会和临床视角的跨学科方法的重要性，以弥合患者期望与现实结果之间的差距，同时促进可持续且以患者为中心的审美医学实践。

Introduction

This systematic literature review is about patient expectations and reality in aesthetic medicine. One motivation to conduct this study is based on a new Australian law prohibiting children under 16 from using social media (Ritchie, 2024). This law aims to protect young people from the harmful effects of social media platforms such as Instagram, Facebook, Snapchat, and TikTok (Ritchie, 2024). Critics question the feasibility of age verification and warn of potential data protection issues (Ritchie, 2024). The debate highlights that social media platforms play a significant role in the lives of young people despite mental health and self-perception issues (Ortutay, 2024). There is a need to better understand social media's influence on patients' perceptions of aesthetic medicine and to analyze the following questions: How do social media platforms shape beauty ideals and decision-making processes? What ethical questions arise in this context? At the center of this study lies this area of focus, examining the intersection between social media use and patient expectations in aesthetic medicine.

Another motivation is that aesthetic medicine has experienced immense growth over the past decades, with an annual growth rate (CAGR) of 8.3% projected until 2030, driven by the increasing demand for invasive and non-invasive treatments (Grand View Research, 2024). This growth is closely linked to the profound influence of social media and digitalization, which play a crucial role in shaping contemporary beauty ideals and significantly impact the expectations of patients and individuals interested in aesthetic procedures (Atiyeh et al., 2024; Laughter et al., 2023; Hermans et al., 2022; Walker et al., 2021).

Key drivers of the spread of unrealistic beauty standards are Instagram and TikTok. These platforms fuel patient desires that are not always attainable and often do not align with the risks associated with aesthetic treatments (Chen et al., 2019; Mehta & Van der Aa, 2019). They frequently present curated and filtered images that reinforce unattainable ideals, leading patients to seek treatments that emulate these edited appearances without being aware of the associated limitations or consequences. Studies also show that misleading advertising exacerbates this phenomenon by portraying aesthetic procedures as simple, risk-free enhancements rather than complex medical interventions that require careful consideration (Collier, 2019; Redaelli, 2020).

The discrepancy between patient expectations and realistic outcomes represents one of the most significant challenges in aesthetic medicine. Patients often have inflated demands that surpass what is realistically achievable, frequently due to a lack of education regarding treatments' risks, benefits, and realistic results (Collier, 2019; ASMS, 2023). This issue is further amplified by the pressure on practitioners to fulfill patient requests, even when they conflict with clinical safety standards or the provider's professional judgment (European Consensus Meeting, 2024). At the core of this issue are ethical considerations, as medical professionals bear the responsibility of guiding patients with evidence-based recommendations and mitigating unrealistic expectations through transparent communication (Mehta & Van der Aa, 2019; Wang et al., 2020).

This topic is significant because it improves patient satisfaction while ensuring the practice of sustainable and safe methods in aesthetic medicine. A deeper understanding of the factors influencing patient expectations can enable practitioners to develop effective communication strategies, helping to mitigate unrealistic demands and set realistic goals (Karadavut, 2017; ASMS, 2023).

This systematic literature review aims to critically explore the status of research about patient expectations and reality in aesthetic medicine and to call for further research based on the identified gaps in the literature using the Prisma framework. This study focuses on the gap between patients' wishes influenced by social media and the real achievable results of aesthetic medicine. It includes studies dealing with aesthetic medicine's psychosocial and ethical dimensions.

Materials and Methods

This systematic literature review analyzes research on the discrepancies between patient expectations and realistic outcomes in aesthetic medicine. The PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) 2020 guidelines were followed to ensure methodological rigor and transparency in identifying, selecting, and synthesizing relevant studies. PRISMA provides a standardized approach to reporting systematic reviews, ensuring the search and selection processes are reproducible and transparent.

DOI 10.2440/013-0004

Inclusion and Exclusion Criteria

Specific inclusion and exclusion criteria were applied to ensure the relevance of the included studies. Studies were included if published in peer-reviewed journals, addressed psychosocial and ethical aspects of patient expectations in aesthetic medicine, examined the influence of social media and advertising on patient desires, and were published between 2018 and 2024. Studies were excluded if they focused exclusively on technological advancements without considering patient perspectives, lacked full-text access or sufficient methodological detail, or were not written in either German or English.

Information Sources

A comprehensive search was conducted in multiple databases, including PubMed and Google Scholar, to identify relevant literature. Additionally, reference lists from key studies were manually searched to capture further relevant articles.

Search Strategy

The literature search was conducted across multiple databases, including PubMed and Google Scholar. It was supplemented by a manual review of reference lists from key studies to identify additional relevant articles. Combined search terms and Boolean operators were used to comprehensively cover the topic, including "Patient expectations in aesthetic medicine," "Impact of social media on cosmetic treatments," "Ethics in aesthetic medicine," "Patient perception in aesthetic medicine," and "Psychological impact of social media." The search strategy was tailored to each database to optimize the quality of the results.

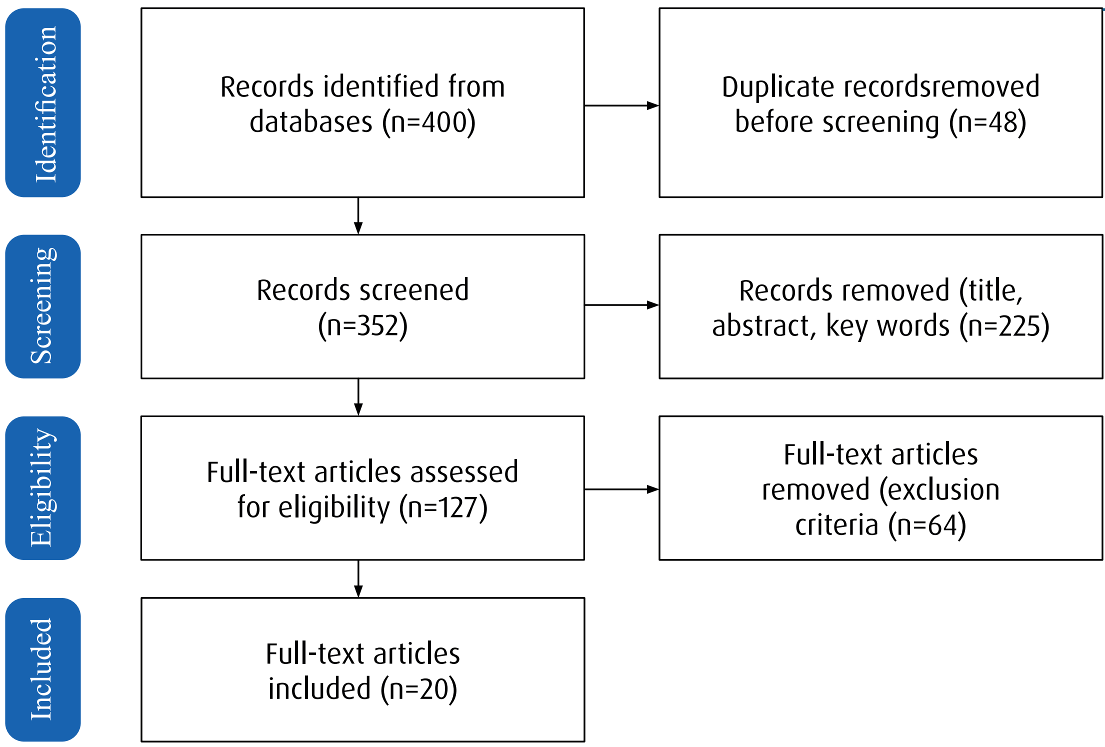


Fig. 1: *Flowchart for PRISMA systematic literature reviews*

Study Selection Process

The study selection process followed the PRISMA flow diagram. In the initial phase, 400 articles were identified. After removing duplicates (n = 48) and irrelevant articles (n = 225), 127 articles remained for abstract and title review. Of these, 64 articles underwent full-text review based on the inclusion and exclusion criteria, and 24 studies were finally included in the analysis. These studies explore the psychosocial, ethical, and communicative aspects of aesthetic medicine and highlight the critical role of social media in shaping beauty ideals and patient expectations.

Risk of Bias Assessment

A structured risk of bias assessment was conducted using the Critical Appraisal Skills Programme (CASP) and the CRAAP test to analyze the articles' eligibility. This approach ensured the methodological quality of the selected studies.

Data Extraction and Synthesis

A data table was created to extract and organize study information, including authorship, publication year, research methods, population characteristics, and key findings. The synthesis focused on identifying themes related to psychosocial and ethical dimensions, communi-

Title	Author(s)	Methodologies Used	No of Participants	Number of Articles and Studies	Type of Respond ents	
Association Between the Use of Social Media and Photograph Editing Applications, Self-esteem, and Cosmetic Surgery Acceptance	Jonlin Chen, BS; Masaru Ishii, MD, PhD; Kristin L. Bater, BA; Halley Darrach, BS; David Liao, BA; Pauline P. Huynh, BA; Isabel P. Reh; Jason C. Nellis, MD; Anisha R. Kumar, MD; Lisa E. Ishii, MD, MHS	Quantitative (Survey)	252		Patients	
Characteristics of Patients Seeking and Proceeding with Non-Surgical Facial Aesthetic Procedures	Sylvia P B Ramirez, Gunther Scherz & Helen Smith	Qualitative Research, Interviews	624	1301	Patients	
Time to Think About the Role of Ethics in Aesthetics	Collier, Helena	Ethical Frameworks			Patients and Practitioners	
Consumer decision-making in cosmetic surgery: An interdisciplinary review identifying key challenges and implications for marketing theory	Fabienne Krywuczky | Mirella Kleijnen	Systematic Review		1133	Patients	

DOI 10.2440/013-0004

cation strategies, and challenges in addressing patient expectations in aesthetic medicine.

Methodological Rigor

This review was structured according to PRISMA guidelines to ensure transparency and reproducibility. It emphasizes integrating diverse perspectives to develop a comprehensive understanding of the topic while maintaining methodological robustness.

This structured approach provides a well-founded synthesis of the current state of knowledge, identifies research gaps, and offers insights to address the challenges of aligning patient desires with realistic goals in aesthetic medicine.

Table 1: *Articles used in this systematic literature review with title, authors, year of publication, country, sample size, and theory*

	Purpose	Year	Origin of Participants	Call for Research
	Social media platforms and photograph (photo) editing applications are increasingly popular sources of inspiration for individuals interested in cosmetic surgery. However, the specific associations between social media and photo editing application use and perceptions of cosmetic surgery remain unknown.	2018	Asian, Spanish, American, Alaskan	The call for research emphasizes the need to explore the causal relationship between social media use, photo editing applications, and attitudes toward cosmetic surgery. Future studies should focus on psychological mechanisms, demographic and cultural differences, and the long-term effects of these influences while evaluating interventions like media literacy programs to address potential negative impacts.
	This paper aims to identify the clinical and demographic characteristics of patients who proceed with non-surgical facial aesthetic procedures in Singapore.	2021	Singapore	The call for research highlights the need to explore how patient characteristics and motivational factors for non-surgical facial aesthetic (NSFA) treatments differ across ethnic groups, which are underrepresented in existing studies. It also emphasizes examining factors influencing treatment decisions globally, given the rising demand for NSFA procedures. Further studies should address these gaps to provide more culturally inclusive insights and help physicians improve consultation effectiveness by understanding diverse patient motivations and clinical characteristics.
	Ethical issues that confront aesthetic healthcare professionals, and calls for more significant consideration of ethics in aesthetic nursing.	2019	United Kingdom	
	This study explores factors shaping cosmetic surgery decisions, focusing on identity, social media, and stakeholder interactions. It must highlight gaps in understanding the consumer journey and its marketing implications.	2024	Netherlands	The research highlights four key marketing challenges in the consumer surgery journey, stemming from gaps in literature and insights from marketing streams. Future studies should address these gaps using the outlined framework and research questions to understand consumer decision-making better.

Title	Author(s)	Methodologies Used	No of Participants	Number of Articles and Studies	Type of Respond ents	
Social Media Influence on Body Image and Cosmetic Surgery Considerations: A Systematic Review	Andreea Mironica , Codruța Alina Popescu , Delaca George , Ana Maria Tegzeșiu , Claudia Diana Gherman	Systematic Review and Meta-Analyses	13731	25	Patients and Practitioners	
Current Role of Social Media in aesthetic Plastic Surgery: Why Plastic Surgeons must take concern?	Tiara Amanna Amanditaa[*], Hastika Saraswati b	Systematic Review and Meta-Analysis		13	Social Media Users	
Encouraging Natural Enhancement in Aesthetic Medicine	Joshua van der Aa, Tristan Mehta	Ethical Framework			Patients and Practitioners	
Ethical Challenges With Nonsurgical Medical Aesthetic Devices	Chelsea O. Hagopian , DNP	Systematic Review		42	Patients and Practitioners	
Facial Aesthetic Priorities and Concerns: A Physician and Patient Perception Global Survey	Sabrina Fabi, MD; Macrene Alexiades, MD, PhD; Vandana Chatrath, MD; Ligia Colucci, MD; Noëlle Sherber, MD, FAAD; Izolda Heydenrych, MD; Jared Jagdeo, MD, MS; Steven Dayan, MD; Arthur Swift, MDCM, FACS; Jonquille Chantrey, MD; W. Grant Stevens, MD, FACS ; and Sara Sangha, PhD	Quantitative (Survey)	16934		Patients and Practitioners	
Fantasies and Fallacies of 'Aesthetic' Instagrammers	Mrigya Sharma, Abhishek Dhakad, Sandeep Sharma,	Qualitative (Case Study)			Users	

	Purpose	Year	Origin of Participants	Call for Research
	This study examines how social media platforms influence body image dissatisfaction and acceptance of cosmetic surgery, highlighting the role of idealized images, cultural norms, and ethical concerns while calling for strategies to promote healthy body perceptions and informed choices.	2024	Italy, Saudi Arabia, China, South Korea, Asia, UK,	The gap in the literature lies in understanding how social media influences cosmetic surgery desires across different demographics and the psychological mechanisms driving these effects.
	This study shows that in the era of Society 5.0, digital technology has significantly impacted doctor-patient communication in the medical field, especially in plastic aesthetic surgery. Only a few plastic surgeons comprehend this digital transformation. This study hopes to help them better understand and adapt to social media.	2023	Global	The gap in the literature is the limited use of social media by plastic surgeons compared to its significant influence, with a preference for practice websites over platforms like Instagram and YouTube.
	In this article, Tristan Mehta and Joshua Van Der Aa explore the issue of natural enhancement in aesthetic medicine.	2019	Netherlands	
	This article aims to increase awareness of the nonsurgical medical aesthetic device industry's ethical challenges, including deceptive or misleading language in advertising, limited evidence of efficacy, and lack of public.	2019	California	
	Minimally invasive and noninvasive facial aesthetic treatments are increasingly popular, and a greater understanding of patient perspectives on facial aesthetic priorities is needed.	2024	United Kingdom, United States, Australia, Brazil, Canada, China, France, Germany, India, Italy, Japan, Mexico, Russia, Saudi Arabia, South Korea, Spain, Taiwan, Turkey	
	This article underscores the profound impact of Instagram on aesthetic surgery, shedding light on both its fantasies and fallacies.	2023	International	

Title	*Author(s)*	*Methodologies Used*	*No of Participants*	*Number of Articles and Studies*	*Type of Respond ents*	
Lip Augmentation with Soft Tissue Fillers: Social Perceptions and Expectations	Bishara S. Atiyeh, MD*, Paul T. Beaineh, MD*, Christopher R. A. Hakim, MD*, Kareem W. Makkawi, MD*, Natasha T. Habr, MD*, Jana H. Zeineddine, MD*, Saif E. Emsieh, MD*, Oussama B. Issa, MD*, Anika G. Gnaedinger, MD†, Amir E. Ibrahim, MD*	Quantitative (Survey)	200		participants	
Patient Perception and Preferences in Choosing a Healthcare Provider for Non-Surgical Facial Aesthetic Procedures	Aya Jabbar Hussein, Faraed Dawood Salman	Quantitative(cross-sectional)	552		participants	
Social Media Marketing: What Do Prospective Patients Want to See?	Marie-Luise Klietz, MD; Hans Wilhelm Kaiser, MD; Hans-Günther Machens, MD; and Matthias Michael Aitzetmüller, MD	Quantitative (Experi-ment)	10500		Users	
The Effect of Service Quality and Clinic Image on Satisfaction to Mediate Revisit Intention and Loyalty in the Beauty Clinic Industry	Andrew Lienata* & Margaretha Pink Berlianto	Quantitative method(Cross-sectional survey)	250		participants	

	Purpose	Year	Origin of Participants	Call for Research
	Though social media influence the perception of beauty, data provided by the survey confirm that golden standards of aesthetics remain constant and that the exaggerated requests of some patients may not be attributed solely to social media influence but probably to social media in combination with additional personal predisposing factors. Patients must be made aware of how others perceive them, which is essential for them to be satisfied with their appearance.	2023	Asia, Europe, North America, Middle East	
	The study revealed that young Iraqi females had some knowledge and were somewhat familiar with NSFA, but most had not undergone procedures. Plasma, filler, and botox were the standard procedures. Dermatologists and dentists were the most common providers; they responded that their educational background was very influential. Social media constituted the lowest percentage, possibly related to the participants' limited knowledge and awareness.	2024	Iraq	There is a need for further research in this area to identify The regions of limited knowledge, social media presence, and the identification of specific reasons may help us address them more effectively and find solutions in recent years.
	This study aimed to design a social experiment based on Instagram to give guidance for efficiency and self-promotion.	2019	International	
	This study examines the direct effect of service quality, which consists of tangibility, reliability, responsiveness, assurance, empathy, and clinic image, on patient satisfaction, assessed by the expectation of intention to revisit and patient loyalty.	2023	Indonesian	

Title	Author(s)	Methodologies Used	No of Participants	Number of Articles and Studies	Type of Respond ents	
The ethics of aesthetics	Svein Aarseth					
The Ideals of Facial Beauty Among Chinese Aesthetic Practitioners: Results from a Large National Survey	Souphiyeh Samizadeh	Quantitative (Survey)	596		participants	
The Impact of Social Media–Driven Fame in Aesthetic Medicine: When Followers Overshadow Science	Giovanni Buzzaccarini, MD ; Rebecca Susanna Degliuomini, MD; and Marco Borin, MD					
The influence of social media on people's decisions to undergo aesthetic procedures	Khaled Seetan, Almu'atasim Khamees, Nora AlKhateeb, Alameed Alsabbah, Majid Masarat, Rand Ahmed Zyout, Rahmah Shareah, Ghaida'a Ananzeh, Mohammad Sami Azu'bi, Sara Muhanna	Quantitative (Cross-sectional, survey-based)	1620		participants	

	Purpose	Year	Origin of Participants	Call for Research
	This article addresses some critical aspects of the relationship between aesthetic medicine (AM) and ethics and proposes a possible deontological ethical line to pursue based on current practices. The role of AM has always been controversial. It needs more practical and moral boundaries, even within academic settings, since it aims to improve the appearance of individuals, not to cure a disease.	2024		
	This study investigated the ideals of facial beauty among Chinese aesthetic practitioners. A questionnaire with simple sketches of facial features was given to aesthetic practitioners in Chinese cosmetology hospitals and clinics to assess their beauty ideals and preferences for facial shapes, facial profiles, nose and lip shapes, jaw angles, and chin shapes.	2019	China	The gap in the literature includes the need for more investigation into the link between beauty ideals and clinical practice, limited statistical significance for older age groups, and the absence of longitudinal data to capture real-world clinical behavior.
	This article is about the attention to a growing trend that has the potential to affect the integrity of our practice and the well-being of patients: the recognition of doctors based on their social media presence rather than scientific knowledge and clinical expertise.	2023	UK	
	This study examines the factors influencing patients' decisions to undergo aesthetic procedures.	2023	Jordan	

Title	*Author(s)*	*Methodologies Used*	*No of Participants*	*Number of Articles and Studies*	*Type of Respond ents*	
The Patient Journey in Facial Aesthetics	Wolfgang G. Philipp-Dormston, Koenraad De Boulle, Yoav Gronovich, Nick Lowe, Karim Sayed, Dimitrios Sykianakis & Serhan Tuncer	Qualitative (consensus-based methodology)	9		practitioners	
The Psychological Impact of Aesthetic Procedures	Ioana A Halip, Laura Gheucă Solovăstru, Laura Stătescu, Ioana A Popescu, Adriana I Pătrașcu, Andra G Salahoru, Bogdan-Marian Tarcău, Alina Stîncanu, Doinița Olinici Temelie, Dan Vâță	Qualitative			Patients	
Two Multinational Observational Surveys Investigating Perceptions of Beauty	Alessio Redaelli MD1 | Sana Siddiqui Syed MBA2 | Xierong Liu PhD3 | Michele Poliziani MA3 | Hakan Erbil MD4 | Inna Prygova MD5 | Vasiliy Atamanov MD6	Qualitative (Observational Survey)	460		participants	
Understanding the Social Media Marketing Activities Influence on Revisit Intention in Beauty Clinics: The Case Study in Bangkok, Thailand	Chanantakanok Jatiyananda, Wasutida Nurittamont, Bordin Phayaphrom	literature review - Quantitative (Survey)	400		participants	

	Purpose	Year	Origin of Participants	Call for Research
	Successful treatment of facial lines with botulinum toxin mainly depends on patient satisfaction; thus, a structured treatment journey using patient-reported outcomes (PROs) helps maximize botulinum toxin results. To develop a patient-centric approach for botulinum toxin injections in facial aesthetics, a group of clinicians met to provide opinions on an optimal treatment journey that uses PROs to quantify treatment benefits on patient quality of life.	2024	Germany	
	Young patients should understand the aesthetic results of surgical aesthetics. Procedures may lead to permanent change. A complete assessment of why the young patient wishes to have the procedure and what difference the patient thinks it will make to their life should be undertaken. Poor psychological outcomes are possible, and unrealistic expectations may warn the doctor against the procedure until the patient is emotionally mature and may need a psychological referral to maintain psychosocial health and improve the quality of life.	2024	Romania	
	This study aimed to survey users and non-users of aesthetic procedures in countries where this information is less readily available to understand attitudes and perceptions relating to beauty.	2020	Colombia, Russia, Thailand, Turkey, United Arab Emirates, Lebanon, Malaysia	
	This research investigates the influence of Social Media Marketing Activities on Brand Image, Brand Trust, Brand Loyalty, and Revisit Intention in Bangkok's beauty clinics.	2022	Bangkok	

Title	Author(s)	Methodologies Used	No of Participants	Number of Articles and Studies	Type of Respond ents
Plastic Surgery Social Media Influencer: Ethical Considerations and a Literature Review	Nisha Gupta, BA; Robert Dorfman, MD; Sean Saadat, MD; and Jason Roostaeian, MD	custom publication date range and a review of the literature		26	participants
The ethical foundations of patient-centered care in aesthetic medicine	Editta Buttura da Prato1, Hugues Cartier2, Andrea Margara3, Beatriz Molina4, Antonello Tateo5,6, Franco Grimolizzi7* and Antonio Gioacchino Spagnolo8			40	practitioners

Key Themes and Scope

The articles in the systematic literature review table examine various perspectives and aspects of aesthetic medicine, particularly the role of social media, patient expectations, ethical challenges, and service quality. The findings underscore the complexity and multifaceted nature of this field, with several key themes emerging:

Social Media and Its Influence on Aesthetic Procedures

Social media platforms, particularly Instagram and TikTok, significantly shape beauty ideals and patient expectations. Studies show that these platforms often promote unrealistic beauty standards, influencing patient expectations and motivations. Chen et al. (2019) and Johansson & Li (2024) emphasize that these beauty standards strongly distort the public perception of aesthetic procedures, leading to heightened expectations. Laughter et al. (2023) and Hermans, Boerman, and Veldhuis (2022) further highlight the role of social media in increasing body dissatisfaction and reinforcing unattainable ideals. Moreover, Maymone et al. (2019) and Atiyeh et al. (2024) demonstrate that social media drives aesthetic trends and influences patient behavior by highlighting the importance of "perfect beauty." These findings underline the critical need for ethical considerations and patient education in the face of such pervasive influences.

Psychosocial Dynamics

Patient satisfaction in aesthetic medicine relies on clear and transparent communication, realistic goal-setting, and trust in the practitioner and clinic. According to Collier (2019), unrealistic expectations often stem from insufficient education and misleading advertisements. ASMS (2023) highlights that patients frequently operate under idealized notions of aesthetic outcomes without fully understanding the realistic possibilities or potential risks. Studies like those by Mehta and Van der Aa (2019) underline that trust in the practitioner is a critical factor for satisfaction.

	Purpose	Year	Origin of Participants	Call for Research
	Social media use has become a relevant tool in plastic surgery. These platforms are utilized for many reasons, such as business promotion. Although beneficial, social media can cause ethical dilemmas if misused.	2019		
	This article addresses some critical aspects of the relationship between aesthetic medicine (AM) and ethics and proposes. A possible deontological ethical line to pursue based on current practices. The role of AM has always been It is controversial and needs more practical and moral boundaries, even within academic settings, since it aims. It is to improve individuals' appearance, not cure a disease.	2024	US	

Laughter et al. (2023) and Hermans, Boerman, and Veldhuis (2022) further emphasize the psychological impact of body dissatisfaction and its influence on patient decision-making. Additionally, Atiyeh et al. (2024) and Wang et al. (2020) stress that open, evidence-based communication plays a pivotal role in managing patient expectations and ensuring long-term satisfaction.

Generational Differences

Karadavut (2017) and Mehta and Van der Aa (2019) reveal that patient priorities and expectations vary significantly across age groups. Social media influences younger patients, who value cosmetic perfection and follow current trends. In contrast, older patients prioritize safety, natural results, and avoiding invasive procedures. Johansson & Li (2024) and Hermans, Boerman, and Veldhuis (2022) stress the need for tailored communication strategies that address the specific needs of different age groups and help prevent unrealistic expectations.

Patient Attitudes and Decision-Making Processes

The articles by Ramirez et al. (2021) and Hussein and Salman (2024) highlight the importance of cultural and demographic differences in decision-making for non-invasive aesthetic treatments. The findings indicate that a deeper understanding of patient expectations and needs is essential to developing personalized treatment plans.

Ethical Challenges

Ethical dilemmas are recurring in the reviewed studies, particularly when patients request unrealistic or high-risk procedures. The European Consensus Meeting (2024) stresses that practitioners often face pressure to meet these demands, which may conflict with clinical safety standards or professional judgment. Collier (2019) underscores the necessity of a mindful approach to ethical principles, such as patient autonomy and informed consent, to bridge the gap between desire and reality. Atiyeh et al. (2024) and Mehta and Van der Aa

(2019) emphasize the importance of practitioners making evidence-based decisions and critically evaluating patient requests to ensure safe and sustainable outcomes. Laughter et al. (2023) further highlight the ethical responsibility to manage patient expectations through transparent communication and education.

Long-Term Effects and Psychosocial Dimensions

Another key focus is the psychosocial consequences of aesthetic procedures, especially for patients with unrealistic expectations. Studies by Johansson and Li (2024) and Chen et al. (2019) point out that unmet expectations can lead to dissatisfaction and psychological stress. Atiyeh et al. (2024) and Maymone et al. (2019) add that the long-term effects on self-esteem and mental health have been only minimally explored, indicating a significant research gap. Further investigation is needed to understand the psychosocial dimensions of aesthetic interventions and their broader impact on patient well-being.

Service Quality and Patient Satisfaction

Studies such as those by Lienata and Berlianto (2023) address the influence of cultural ideals and social perceptions on expectations for aesthetic treatments. They focus on adopting a global perspective to tailor treatments to diverse patient groups' needs and expectations.

The articles in the systematic literature review have different characteristics such as geographic scope, background of participants, or researc. The findings underscore the complexity and multifaceted nature of this field, with several key themes emerging.

Geographic Diversity

The studies cover a wide range of regions, including Asia (e.g., China, South Korea, Singapore), Europe (e.g., the United Kingdom, Netherlands, Italy), North America (e.g., the United States), the Middle East (e.g., Iraq), and other international contexts such as Malaysia, Russia, Colombia, and Australia. This geographic diversity enables the detailed analysis and consideration of cultural differences and global trends in aesthetic medicine.

DOI 10.2440/013-0004

Participant Backgrounds

The participants include patients and aesthetic medicine practitioners, allowing for a holistic view of the topics. They represent population groups of various ages, genders, and ethnicities, including Asian, Hispanic, American, and European participants. This broad representation ensures the findings are widely relevant, reflecting global trends and regional particularities.

International Representativeness

The large number of participants and the broad geographic coverage contribute to the literature review's findings being considered representative of global aesthetic medicine. The international perspective highlights cultural and regional differences while enabling the identification of shared challenges, such as ethical considerations, the influence of social media, and patient expectations.

In summary, the studies emphasize the importance of a global and interdisciplinary approach to developing well-founded insights and evidence-based recommendations for aesthetic medicine.

Theoretical Frameworks of the Studies

The diverse theoretical frameworks applied in the studies allow for an in-depth analysis of the complex topics within aesthetic medicine from different perspectives. These approaches range from psychological and sociological theories to ethical and marketing-related models.

Sociocultural Frameworks

Some studies and articles, such as those by Ramirez et al. (2021), draw on sociocultural theories to analyze cultural and demographic differences in decision-making for aesthetic treatments. This perspective highlights how cultural norms and societal expectations shape perceptions of beauty and the demand for aesthetic procedures.

Ethical Models

Several studies emphasize ethical aspects, as seen in the works of Collier (2019) and Hagopian (2019). Both apply ethical frameworks to address transparency, patient education, and the balance between beauty and health. These studies underscore the necessity of clear ethical guidelines to strengthen patient trust and ensure transparency and integrity within the industry.

Marketing Theories

Another focus lies on marketing-related models, particularly in studies examining patient decision-making and the influence of social media and branding (Walker et al., 2021; Atiyeh et al., 2024). Concepts such as the theory of planned behavior and digital marketing strategies are employed to explain the dynamics between patient expectations, brand perception, and revisit intentions (Hermans, Boerman, & Veldhuis, 2022; Jatiyananda et al., 2021).

Interdisciplinary Approaches

Some studies integrate multiple theoretical frameworks, capturing the multidimensional nature of aesthetic medicine (Atiyeh et al., 2024; Hermans, Boerman, & Veldhuis, 2022). Psychological and ethical models are often combined with marketing approaches for a more comprehensive analysis (Laughter et al., 2023; Walker et al., 2021).

Methods Used

The studies analyzed in this systematic literature review employed a diverse range of research methodologies. This allows for a more comprehensive understanding by capturing different dimensions of a complex subject. For instance, qualitative methods provide deep insights into patient experiences and motivations, while quantitative approaches offer measurable and generalizable data. Systematic reviews and meta-analyses synthesize these findings, identifying overarching trends and research gaps.

Qualitative Research

Studies utilized different research and data collection methods such as case studies, Delphi techniques, semi-structured interviews, and focus groups to explore patient perceptions, motivations, and concerns related to aesthetic procedures (Ramirez et al., 2021; Halip et al., 2024; Sharma et al., 2023; Buzzaccarini et al., 2023).

Quantitative Research

Statistical approaches were employed to evaluate service quality and revisit intention in aesthetic clinics. Cross-sectional and observational studies analyzed trends in patient satisfaction, clinical preferences, and the influence of social media on decision-making (Chen et al., 2018; Hussein & Salman, 2024; Redaelli et al., 2020; Lienata & Berlianto, 2023; Klietz et al., 2019; Samizadeh, 2019).

Systematic Reviews and Meta-Analyses

These methods synthesized existing studies to examine the role of social media, ethical challenges, and emerging trends in aesthetic medicine, identifying critical research gaps (Mironica et al., 2024; Amanditaa & Saraswati, 2023; Mehta & Van der Aa, 2019).

Research Gaps and Calls for Further Research

In this section, research gaps and calls for further research are identified for each key theme (cp. table 2).

1. Long-Term Psychosocial Effects: Halip et al. (2024) and Atiyeh et al. (2024) highlight the lack of longitudinal studies on the psychosocial impacts of aesthetic procedures. Current research predominantly focuses on short-term outcomes, leaving the long-term effects on self-esteem, social integration, and overall well-being underexplored. Future research should conduct systematic longitudinal studies to evaluate these dimensions, providing a deeper understanding of the enduring implications of aesthetic interventions.
2. Cultural Differences: Cultural and demographic differences significantly influence patients' decisions regarding aesthetic treatments. Ramirez et al. (2021) and Hussein & Salman (2024) underscore the scarcity of research examining these variations. Hermans, Boerman, and Veldhuis (2022) call for an analysis of patient expectations and needs across diverse regions and cultural backgrounds. Addressing this gap requires targeted research to develop culturally sensitive and region-specific treatment approaches, enhancing patient satisfaction and inclusivity in practice.
3. Influence of Social Media: The pervasive influence of social media on body image and aesthetic aspirations remains insufficiently understood. Mironica et al. (2024) and Chen et al. (2019) identify a need to unravel the psychological mechanisms behind social media's impact on body dissatisfaction and the desire for aesthetic procedures. Future studies should investigate idealized beauty standards' effects on diverse populations and examine the associated long-term consequences to inform interventions and public awareness campaigns.
4. Ethical Considerations: Ethical challenges in aesthetic medicine, including transparency, patient education, and unrealistic expectations, are highlighted by Collier (2019) and Hagopian (2019). Developing comprehensive, internationally applicable ethical frameworks is essential. Future research should focus on creating guidelines that prioritize ethical practice, improve patient

DOI 10.2440/013-0004

outcomes, and establish industry-wide standards.

5. Service Quality and Patient Satisfactio: Lienata & Berlianto (2023) and Maymone et al. (2019) reveal limited studies on how cultural and social factors influence patients' perceptions of service quality. Comparative research is needed to explore these influences systematically, shedding light on how regional and cultural contexts shape patient experiences and satisfaction, thereby improving service delivery.

Table 2: *Topics and categories, research gaps, and calls for further research*

Category	Research Gap	Call for Further Research	Source(s)
Long-Term Psychosocial Effects	Halip et al. (2024) and Atiyeh et al. (2024) emphasize the lack of systematic longitudinal studies on the impacts of aesthetic procedures on psychological health and social well-being.	Conduct systematic longitudinal studies to explore how these procedures influence self-esteem, social integration, and overall well-being over time.	Halip et al. (2024); Atiyeh et al. (2024)
Cultural Differences	Ramirez et al. (2021) and Hussein & Salman (2024) identify limited research on cultural and demographic differences in decision-making for aesthetic treatments. Hermans, Boerman, and Veldhuis (2022) suggest analyzing patients' expectations and needs from different cultures and regions.	Analyze patients' specific expectations and needs from different regions and cultures to develop culturally sensitive and targeted treatment approaches.	Ramirez et al. (2021); Hussein & Salman (2024); Hermans, Boerman, & Veldhuis (2022)
Influence of Social Media	Mironica et al. (2024) and Chen et al. (2019) highlight the insufficient understanding of the psychological mechanisms behind social media's influence on body dissatisfaction and aesthetic procedure desires.	Investigate the impact of idealized beauty standards on various target groups and their associated long-term consequences.	Mironica et al. (2024); Chen et al. (2019)
Ethical Considerations	Collier (2019) and Hagopian (2019) stress the absence of unified ethical guidelines in aesthetic medicine, focusing on transparency, patient education, and managing unrealistic expectations.	Develop comprehensive ethical frameworks that are internationally applicable and focus on transparency, patient education, and managing unrealistic expectations.	Collier (2019); Hagopian (2019)
Service Quality and Patient Satisfaction	Lienata & Berlianto (2023) and Maymone et al. (2019) indicate the lack of comparative studies on how cultural and social factors influence patients' expectations of service quality.	Systematically explore regional and cultural differences to understand how these contexts shape patient experiences and satisfaction.	Lienata & Berlianto (2023); Maymone et al. (2019)

Conclusion

This systematic literature review examined the complex relationship between patient expectations and realistic outcomes in aesthetic medicine, focusing on the influence of social media, ethical considerations, and psychosocial aspects. The aim was to understand better the mechanisms leading to discrepancies between desires and reality and provide practice-relevant insights for aesthetic medicine.

This study was motivated by the growing impact of social media on perceptions of aesthetic treatments. Australia recently banned social media use for children under 16, aiming to mitigate its negative effects on mental health and self-perception, though concerns about feasibility and data protection persist (Ritchie, 2024; Ortutay, 2024). Additionally, aesthetic medicine has seen rapid expansion, with a projected CAGR of 8.3% until 2030, driven by rising demand for treatments. This growth is strongly influenced by social media and digitalization, which shape beauty ideals and significantly affect patient expectations (Grand View Research, 2024; Atiyeh et al., 2024; Laughter et al., 2023; Hermans et al., 2022; Walker et al., 2021). Therefore, this study addresses the need to better understand how social media influences beauty ideals, patient decision-making, and associated ethical challenges.

Instagram and TikTok play a central role in shaping unrealistic beauty ideals through curated and filtered content. Research shows that these platforms significantly influence patient desires, often fostering unattainable expectations that overshadow the risks and limitations of aesthetic treatments (Chen et al., 2019; Mehta & Van der Aa, 2019). These platforms frequently feature curated and filtered images that reinforce unattainable ideals, prompting patients to seek procedures that mimic these edited appearances – often without understanding the associated limitations or consequences.

The systematic literature review identifies several critical research gaps in aesthetic medicine, highlighting the need for systematic longitudinal studies to explore how aesthetic procedures influence self-esteem, social integration, and overall well-being over time. It calls for analyzing patients' specific expectations and needs from different regions and cultures to develop culturally sensitive and targeted treatment approaches. Additionally, it emphasizes the importance of investigating the impact of idealized beauty standards on various target groups and their associated long-term consequences. There is also a pressing need to develop comprehensive ethical frameworks that are internationally applicable and focus on transparency, patient education, and managing unrealistic expectations. Lastly, systematic exploration of regional and cultural differences is required to understand how these contexts shape patient experiences and satisfaction, enhancing service quality and patient outcomes.

While this systematic literature review provides valuable insights, it is not without limitations. One major constraint is the reliance on existing studies, which can limit the scope of analysis to the methodologies, sample sizes, and contexts chosen by previous researchers. This may introduce biases or gaps, particularly if certain populations or regions are underrepresented in the available literature. Additionally, the timing of the reviewed studies poses a challenge, as rapid advancements in aesthetic medicine and evolving societal attitudes may render some findings less relevant or outdated. Finally, the inclusion and exclusion criteria used to select studies could inadvertently omit relevant research, impacting the comprehensiveness of the review. These limitations highlight the need for ongoing and updated research to address emerging trends and contexts in aesthetic medicine.

This study holds significant value in advancing the field of aesthetic medicine by systematically identifying key research gaps and proposing targeted calls for further research. By synthesizing insights across diverse themes—ranging from psychosocial impacts and cultural considerations to the influence of social media and ethical frameworks—it provides a comprehensive roadmap for future studies. Addressing these gaps is crucial not only for improving patient care and satisfaction but also for fostering evidence-based practices that are culturally inclusive and ethically sound. Furthermore, the findings have the potential to inform policymakers, practitioners, and researchers, contributing to the development of standardized guidelines and tailored approaches that enhance the overall quality and outcomes of aesthetic treatments. This study serves as a critical step toward a more holistic understanding of the complexities within aesthetic medicine.

Author Contact Information

Correspondence regarding this article should be directed to A. Aloui at ameni.aloui@student.eim.education.

Conflict of (Competing) Interest

The authors declare that they have no (competing) financial or non-financial interests related to this study.

Funding

The authors self-funded the research, and no external funding was obtained for its completion.

Acknowledgments

The author gratefully acknowledges Michael Neubert for his invaluable inspiration in conceptualizing this article, his contributions to developing its structure and methodology, and his critical revisions and support in preparing it for publication.

Data Availability and Supplementary Material

All data generated and analyzed during this study and supplementary material are available upon reasonable request.

Prior Publication

The authors confirm that this research has not been published previously and is not under consideration for publication elsewhere.

Ethics Statement

This study complies with the ethical guidelines of the European Code of Conduct for Research Integrity and adheres to the GDPR requirements for data protection. Ethical approval was obtained from the Institutional Review Board of EIM, and informed consent was secured from all participants.

Responsible AI Ethics Statement

This study used artificial intelligence (AI) tools to support tasks such as identifying relevant literature, analyzing datasets, and editing textual content. These tools were employed solely to enhance efficiency, and their outputs were critically reviewed to ensure alignment with research objectives. The use of AI adheres to ethical principles outlined in the EU AI Act, the OECD AI Principles, and the UNESCO Recommendation on the Ethics of Artificial Intelligence, emphasizing transparency, fairness, and accountability. The authors made all final decisions and retain full responsibility for this research's integrity, rigor, and conclusions.

References

Aarseth, S. (2019, February 25). The ethics of aesthetics. *Tidsskrift for Den norske legeforening.* https://doi.org/10.1016/s12345-67890

Amandita, T. A., & Saraswati, H. (2023). Current role of social media in aesthetic plastic surgery: Why plastic surgeons must take concern? *Jurnal Rekonstruksi dan Estetik, 8*(2), 117–134. https://doi.org/10.20473/jre.v8i2.50274

Atiyeh, B. S., Beaineh, P. T., Hakim, C. R. A., Makkawi, K. W., et al. (2024). Lip augmentation with soft tissue fillers: Social media, perceptual adaptation, and shifting beauty trends beyond golden standard ideals. *Plastic and Reconstructive Surgery Global Open, 12,* e6238. https://doi.org/10.1097/GOX.0000000000006238

Buzzaccarini, G., Degliuomini, R. S., & Borin, M. (2023). The impact of social media–driven fame in aesthetic medicine: When followers overshadow science. *Aesthetic Surgery Journal, 43*(10), 807–808. https://doi.org/10.1093/asj/sjad190

Chen, J., Ishii, M., Bater, K. L., Darrach, H., Liao, D., Huynh, P. P., Reh, I. P., Nellis, J. C., Kumar, A. R., & Ishii, L. E. (2019). Association between the use of social media and photograph editing applications, self-esteem, and cosmetic surgery acceptance. *JAMA Facial Plastic Surgery, 21*(5), 361–367. https://doi.org/10.1001/jamafacial.2019.0328 da Prato, E. B., Cartier, H., Margara, A., Molina, B., Tateo, A., Grimolizzi, F., & Spagnolo, A. G. (2024). The ethical foundations of patient-centered care in aesthetic medicine. *Philosophy, Ethics, and Humanities in Medicine, 19*(1), 1–7. https://doi.org/10.1186/s13010-024-00151-1

Fabi, S., Alexiades, M., Chatrath, V., Colucci, L., Sherber, N., Heydenrych, I., Jagdeo, J., Dayan, S., Swift, A., Chantrey, J., Stevens, W. G., & Sangha, S. (2021). Facial aesthetic priorities and concerns: A physician and patient perception global survey. *Aesthetic Surgery Journal, 42*(4), 218–229. https://doi.org/10.1093/asj/sjab358

Grand View Research. (2024). Aesthetic Medicine Market Size, Share & Trends Analysis. Retrieved from https://www.grandviewresearch.com/industry-analysis/medical-aesthetics-market

Gupta, N., Dorfman, R., Saadat, S., & Roostaeian, J. (2020). The plastic surgery social media influencer: Ethical considerations and a literature review. *Aesthetic Surgery Journal, 40*(6), 691–699. https://doi.org/10.1093/asj/sjz329

Hagopian, C. O. (2019). Ethical challenges with nonsurgical medical aesthetic devices. *Plastic Surgical Nursing, 39*(1), 5–6. https://doi.org/10.1097/PSN.0000000000000253

Halkias, D., & Neubert, M. (2020). Extension of Theory in Leadership and Management Studies Using the Multiple Case Study Design. *International Leadership Journal, 12*(2), 48–73. https://doi.org/10.2139/ssrn.3586256

Halkias, D., Neubert, M., & Harkiolakis, N. (2023). Multiple Case Study Data Analysis for Doctoral Researchers in Management and Leadership. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.4423757

Hermans, A. M., Boerman, S. C., & Veldhuis, J. (2022). Follow, filter, filler? Social media usage and cosmetic procedure intention, acceptance, and normalization among young adults. *Body Image, 43,* 440–449. https://doi.org/10.1016/j.bodyim.2022.08.004

Klietz, M.-L., Kaiser, H. W., Machens, H.-G., & Aitzetmüller, M. M. (2020). Social media marketing: What do prospective patients want to see? *Aesthetic Surgery Journal, 40*(5), 577–583. https://doi.org/10.1093/asj/sjz204

Krywuczky, F., & Kleijnen, M. (2024). Consumer decision-making in cosmetic surgery: An interdisciplinary review identifying key challenges and implications for marketing theory. *Psychology & Marketing, 41*(12), 3182–3201. https://doi.org/10.1002/mar.22104

Lienata, A., & Berlianto, M. P. (2023). The effect of service quality and clinic image on satisfaction to mediate revisit intention and loyalty in beauty clinic industry. *Daengku: Journal of Humanities and Social Sciences Innovation, 3*(4), 551–563. https://doi.org/10.35877/454RI.daengku1735

Maryana, M., & Christiany, M. (2022). Hubungan Aspek Kualitas Pelayanan Dengan Kepuasan Pasien Rawat Inap. *Citra Delima: Jurnal Ilmiah STIKES Citra Delima Bangka Belitung, 5*(2), 105–112. https://doi.org/10.33862/citradelima.v5i2.262

Mehta, T., & Van der Aa, J. (2019). Encouraging natural enhancement in aesthetic medicine. *Journal of Aesthetic Nursing, 8*(2), 72–74. https://doi.org/10.12968/joan.2019.8.2.72

Mironica, A., Popescu, C. A., George, D., Tegzeşiu, A. M., & Gherman, C. D. (2024). Social media influence on body image and cosmetic surgery considerations: A systematic review. *Cureus, 16*(7), e65626. https://doi.org/10.7759/cureus.65626

Neubert, M. (2023). *Guía breve y sencilla para utilizar el estudio de casos como método de investigación*. BOD GmbH DE.

Neubert, M. (2022). A Systematic Literature Review about the Speed of Internationalization. *International Journal of Business and Management, 17*(2), 80-111. https://doi.org/10.5539/ijbm.v17n2p80

Neubert, M. (2022). A Systematic Literature Review of Dynamic Pricing Strategies. *International Business Research, 15*(4), 1–17. https://doi.org/10.5539/ibr.v15n4p1

Ortutay, B. (2024, December 4). Australia is banning social media for people under 16. Could this work elsewhere — or even there? *AP News.* https://apnews.com/article/social-media-ban-australia-kids-4dda8d92bd4b896ff502482b6736ab24

Ramirez, S. P. B., Scherz, G., & Smith, H. (2021). Characteristics of patients seeking and proceeding with non-surgical facial aesthetic procedures. *Clinical, Cosmetic and Investigational Dermatology, 14,* 197–207. https://doi.org/10.2147/CCID.S296970

Ritchie, H. (2024, November 29). Australia bans social media for children under 16. *ABC News.* https://www.bbc.com/news/articles/c89vjj0lxx9o

Samizadeh, S. (2019). The ideals of facial beauty among Chinese aesthetic practitioners: Results from a large national survey. *Aesthetic Plastic Surgery, 43,* 102–114. https://doi.org/10.1007/s00266-018-1241-8

Sharma, M., Dhakad, A., & Sharma, S. (2024). Fantasies and fallacies of 'aesthetic' Instagrammers. *Indian Journal of Plastic Surgery.* https://doi.org/10.1055/s-0044-1790588

Walker, C. E., Krumhuber, E. G., Dayan, S., & Furnham, A. (2021). Effects of social media use on desire for cosmetic surgery among young women. *Current Psychology, 40,* 3355–3364. https://doi.org/10.1007/s12144-021-01616-8

Age-based Adoption of AI-based Smart Home Technologies among Chinese Millenials and Gen Z Consumers

Timur Kuziaev, Michael Neubert
EIM – European Institute of Management, Valetta, Malta

Abstract

The purpose of this quantitative study was to examine the factors influencing the age-based adoption patterns of AI-based Smart Home Technologies (AI-SHT) among Chinese millennials and Gen Z consumers. The theoretical foundation of the study was based on an extended Technology Acceptance Model (TAM), incorporating perceived usefulness, ease of use, trust, and user attitude as factors influencing purchasing intention. Data were collected from 388 Chinese millennials and Generation Z consumers through a standardized 5-point Likert scale survey in October 2024. The factor model exhibits high explanatory power, collectively accounting for 72% of the variance in consumer intention to adopt AI-SHT among Gen Z and Millenial consumers in China. This study advances the understanding of TAM's applicability across age groups, identifying specific needs and expectations of different age groups for AI-SHTs through factor analysis and correlation testing. This research contributes actionable insights for developers, marketers, and policymakers aiming to support demographic-specific adoption. Limitations include an absence of longitudinal data to track changes over time and the exclusion of other factors that may impact adoption behaviors. Future research should address these limitations to improve generalizability and depth of understanding.

#Keywords

Artificial Intelligence, China, Generation Z, Millennial, Smart Home Technology, Technology Acceptance Model, Telecommunication, Perceived Usefulness, Trust, Perceived Ease-of-Use, User Attitude, Age-based.

doi: 10.2440/013-0005

Altersabhängige Akzeptanz und Nutzung KI-basierter Smart-Home-Technologien unter chinesischen Millennials und Angehörigen der Gen Z

Der Zweck dieser quantitativen Studie bestand darin, die Faktoren zu untersuchen, die die altersbedingten Adoptionsmuster von KI-basierten Smart-Home-Technologien (KI-SHT) unter chinesischen Millennials und Gen-Z-Konsumenten beeinflussen. Die theoretische Grundlage der Studie basierte auf einem erweiterten Technologieakzeptanzmodell (TAM), das wahrgenommene Nützlichkeit, Benutzerfreundlichkeit, Vertrauen und Nutzerhaltung als Faktoren einbezog, die die Kaufabsicht beeinflussen. Daten wurden im Oktober 2024 von 388 chinesischen Millennials und Gen-Z-Konsumenten mithilfe einer standardisierten Umfrage auf einer 5-Punkte-Likert-Skala erhoben. Das Faktormodell weist eine hohe Erklärungskraft auf und erklärt gemeinsam 72 % der Varianz in der Absicht zur Adoption von KI-SHT bei Gen-Z- und Millennial-Konsumenten in China. Diese Studie erweitert das Verständnis der Anwendbarkeit des TAM über Altersgruppen hinweg und identifiziert durch Faktorenanalyse und Korrelationstests spezifische Bedürfnisse und Erwartungen verschiedener Altersgruppen in Bezug auf KI-SHT. Diese Forschung liefert umsetzbare Erkenntnisse für Entwickler, Vermarkter und politische Entscheidungsträger, die die altersspezifische Adoption unterstützen möchten. Einschränkungen umfassen das Fehlen von Längsschnittdaten zur Verfolgung von Veränderungen über die Zeit sowie den Ausschluss anderer Faktoren, die das Adoptionsverhalten beeinflussen könnten. Zukünftige Forschung sollte diese Einschränkungen angehen, um die Generalisierbarkeit und das tiefere Verständnis zu verbessern.

DOI 10.2440/013-0005

中国千禧与Z世代对AI智能家居的年龄差异性采纳研

本量化研究的目的是探讨影响中国千禧一代和Z世代消费者基于年龄的AI智能家居技术（AI-SHT）采用模式的因素。研究的理论基础基于扩展的技术接受模型（TAM），包括感知有用性、易用性、信任和用户态度等影响购买意图的因素。数据通过标准化的5点李克特量表调查于2024年10月从388名中国千禧一代和Z世代消费者中收集。因子模型表现出较高的解释力，共同解释了中国Z世代和千禧一代消费者对AI-SHT采用意图72%的变异。本研究通过因子分析和相关性测试，揭示了TAM在不同年龄组中的适用性，明确了不同年龄组对AI-SHT的特定需求和期望。本研究为开发者、营销人员和政策制定者提供了支持特定人群采用的实用见解。局限性包括缺乏纵向数据以跟踪随时间的变化，以及排除了可能影响采用行为的其他因素。未来研究应解决这些局限性，以提高研究结果的普遍性和深入理解。

Introduction

The topic or phenomenon of the investigation was the adoption of AI-SHT among Chinese millennials and Gen Z consumers. The motivation for this research was that advancements in 5G network technology, Artificial Intelligence, and the Internet of Things are opening fresh opportunities for growth in the smart home technology sector (China Daily, 2023). Data from International Data Corp indicates that smart home device shipments in China reached 260 million units last year, up over 17 percent, and are projected to grow to 540 million units by 2025, with revenue exceeding 800 billion yuan ($111.1 billion) (China Daily, 2023).

The need to conduct this study is that exploring factors driving the adoption of AI-SHTs among Chinese Millenials and Gen Z consumers is important given the evolving needs and preferences highlighted by industry leaders. Haier, a major player in the market, emphasizes that customers increasingly seek integrated and personalized smart home experiences rather than isolated devices (China Daily, 2023). Millennials, and especially Gen Z, value a seamless integration of human and machine interactions, where all household devices are interconnected, creating a cohesive, intelligent ecosystem that enhances daily living (China Daily, 2023).

The theoretical significance of this research is that it contributes to the research on age-based AI-based consumer technology adoption and the technology acceptance model (TAM). The significance of this research for practice is to inform telecommunication managers and other stakeholders in China about the factors that may influence the adoption of AI-SHTs among Chinese millennials and Gen Z consumers.

This article is structured as follows: After a brief introduction, the second chapter reviews the current literature on the adoption of AI-SHTs and discusses the Technology Acceptance Model (TAM) as the theoretical foundation. The third chapter presents the quantitative correlational research methodology, followed by the study results in Chapter 4. The results are discussed in Chapter 5, and Chapter 6 concludes the article, covering the contributions, implications, recommendations, and limitations.

Literature Review and Theoretical Framework

The research problem is based on a call for further research by Kelly et al. (2023) that stakeholders still need a better understanding of consumers' perception of AI adoption. Other studies about AI technology adoption in the Chinese telecommunication industry used an organizational rather than a consumer perspective (Chen, 2019) or focused on other countries (Ali & Freiman, 2021). Therefore, the purpose of this quantitative study was to examine the factors influencing the age-based adoption of AI-SHTs among Chinese millennials and Gen Z consumers.

The adoption of AI-SHT among younger consumers has been increasingly studied, though primarily in contexts outside China or through non-consumer-centric approaches. For example, Leung and Cheung (2024) utilized the Theory of Planned Behaviour (TPB) to assess young consumers' general optimism and innovativeness toward technology. Still, they did not analyze Millennials and Gen Z through the Technology Acceptance Model (TAM). Studies like Zhang et al. (2024) found that positive attitudes toward smart home products directly influence teenagers' behavioral intentions, with personal capabilities being critical to actual adoption. However, Zhang et al. (2024) did not address Millennials or Gen Z specifically or examined the standards of living or other variables within the AI-SHT context. Chin et al. (2024) contributed further by identifying perceived usefulness (PU), ease of use (PEU), and social presence as significant motivators for Gen Z users' intentions to adopt smart home technologies, with trust moderating the effects of these variables on adoption intentions. This emphasizes the role of trust in shaping consumer attitudes but underscores the need to explore these dynamics specifically for Chinese Millennials and Gen Z.

Recent studies have highlighted factors beyond traditional models, adding variables like transparency, compatibility, and reliability, significantly impacting attitudes toward AI-SHT. Ismatullaev and Kim's (2024) findings underscore that improved perceptions of AI-based technology could be achieved through transparency and reliability, which fosters consumer trust—a key consideration for Chinese Millennials and Gen Z. Studies like ElSayad and Mamdouh (2024), focusing on Egyptian Millennials and Gen Z, similarly showed that optimism, innovativeness, and discomfort are pivotal in influencing perceived trust and usefulness, which in turn predict purchase intentions. These findings suggest a possible cultural and demographic consistency in predictors of AI adoption across different national contexts. Furthermore, Valencia-Arias et al. (2023) found that technology acceptance theories are often extended with additional factors in the context of smart home technology, underscoring the need for a comprehensive model to evaluate adoption factors among young Chinese consumers specifically.

Further reinforcing the model's significance, Ji & Chan (2019) found that Chinese users' adoption intention for smart home energy technologies is primarily driven by technical performance (or perceived usefulness) over economic considerations like cost savings, highlighting an attitudinal divergence from financial motivations. Li et al. (2021) expanded on the relevance of service motivations by identifying primary adoption drivers in smart home technology as healthcare services, energy efficiency, home security, and quality of life improvements. Li et al. also noted barriers to adoption, such as distrust, resistance, financial concerns, privacy issues, and negative social influences, pinpointing the complexities in consumer attitudes toward smart home technology.

Yu et al. (2024) further demonstrated that Chinese users' adoption intentions are positively driven by factors such as perceived usefulness, ease of use, convenience, innovativeness, and trust, with

DOI 10.2440/013-0005

convenience standing out as the primary factor. Notably, Choudhary et al. (2024) highlighted that in India, perceived usefulness most significantly fosters a favorable attitude toward adopting AI-based smart home voice assistants, echoing the prominence of usefulness in adoption motivations.

The Technology Acceptance Model (TAM) was chosen as the theoretical framework for this study because "it was found to have the most predictive success in measuring behavioral intentions" (Kelly et al., 2023, p. 30). The TAM suggests that perceived usefulness (PU) and perceived ease-of-use (PEU) influence consumers' technology adoption intentions and actual usage (Davis, 1986, 1989). PU indicates how beneficial users find the technology in daily life as a primary positive predictor of adoption intention (Davis, 1989; Rafique et al., 2020). In contrast, PEU stands for the ease of use of consumer electronics (Chi, 2018). Depending on the context of the study, TAM often incorporates other factors, such as trust (TR), which may influence consumer's perceptions of security while using consumer technologies (Chang et al., 2017). The factor trust has already been shown to positively influence PU as a predictor in AI adoption and was also used for the context of this study (Chin et al., 2024; Choung et al., 2023).

Research Method

Following this study's purpose and research problem, the nature is quantitative. The study adopts a deductive approach within a post-positivist framework, which is appropriate for examining TAM constructs in a structured manner and testing specific hypotheses. The post-positivist worldview acknowledges that while human behavior is complex, there are measurable constructs—like PU, PEU, UA, and TR—that can help predict technology acceptance across different age groups. This approach allowed the study to draw inferences from observed correlations, contributing to understanding how age influences perceptions of AI-based technology adoption.

Research question and hypotheses

The research question is: What factors influence the age-based adoption of AI-based Smart Home Technologies among Chinese Millenials and Gen Z consumers?

Based on the research question, the following hypotheses are formulated:

H1: Perceived usefulness (PU) positively influences user attitude (UA) toward AI-based smart home technologies across all age groups, with older groups emphasizing security and cost-saving benefits more.

H2: Perceived ease of use (PEU) positively impacts UA, particularly among Gen Z users, who are more likely to adopt if the technology is intuitive and easy to learn.

H3: Trust (TR) in data security and brand transparency significantly influences adoption, particularly among Gen Z users with heightened privacy concerns.

H4: Age is a moderating factor in the relationship between TAM dimensions (PU, PEU, TR) and user attitudes (UA), with millennial users showing the strongest purchase intention for technologies that enhance home value and safety.

Sample

The required sample size of 385 was calculated based on the total Chinese millennial and Generation Z population, a margin of error of 5%, and a confidence level of 95% (Neubert & van der Krogt, 2019). The sampling method was simple random sampling. The effective sample size of filled-out and returned questionnaires is 388. The descriptive demographic analysis of the sample shows the following results.

Table 1: *Descriptive Demographics of Sample*

Age (388)	
• Generation Z (1997-2012)	• 35% (136)
• Millennials (1981-1996)	• 65% (246)
Gender (388)	
• Male	• 36% (142)
• Female	• 63% (242)
• Prefer not to say	• 1% (4)
Educational Level (388)	
• Less than high-school	• 1% (5)
• High-school diploma or equivalent	• 16% (61)
• Some college	• 5% (21)
• Bachelor's Degree	• 25% (97)
• Master's Degree	• 46% (177)
• Doctoral Degree	• 5% (21)
• Prefer not to say	• 2% (6)
Annual Household Income (388)	
• Less than USD 30'000	• 3% (9)
• USD 30'001 - USD 50'000	• 5% (19)
• USD 50'001 - USD 75'000	• 9% (35)
• USD 75'001 - USD 100'000	• 36% (143)
• More than USD 100'000	• 46% (179)
• Prefer not to say	• 1% (3)
Employment Status (388)	
• Employed	• 52% (201)
• Self-employed	• 27% (102)
• Other (student, unemployed)	• 20% (73)
• Prefer not to say	• 1% (3)
Property Ownership (388)	•
• Own	• 48% (186)
• Rent	• 26% (103)
• Other (e.g., living with family)	• 23% (89)
• Prefer not to say	• 3% (10)
Household Size (388)	•
• 1 (alone)	• 18% (69)
• 2	• 4% (15)
• 3	• 61% (238)
• 4	• 10% (39)
• 5	• 6% (24)
• Prefer not to say	• 1% (3)

DOI 10.2440/013-0005

Comfortable with using nes technologies (388)	
• Very comfortable • Comfortable • Neutral • Uncomfortable • Very uncomfortable	• 13% (51) • 39% (149) • 37% (142) • 7% (25) • 4% (20)
Use of any Smart Home Technology (388)	
• Yes • No • Considering it • Not familiar with them	• 96% (371) • 1% (4) • 2% (8) • 1% (5)

Data Collection

The study used a structured 26-item questionnaire, with responses recorded on a 5-point Likert scale ranging from "Strongly Disagree" (1) to "Strongly Agree" (5). Questions were segmented into TAM constructs (PU, PEU, UA, TR) and demographic attributes, allowing the study to explore correlations and relationships between adoption factors and age demographics. Data was collected in October 2024 using Survey Monkey.

Data Analysis

SPSS was used to analyze the collected survey data. Several statistical tests and analyses were employed to ensure data robustness and the reliability of used constructs (Schaefer et al., 2021). Cronbach's alpha was employed to ensure consistency and reliability across each TAM construct. The results indicated high reliability for each TAM dimension, with alpha values as follows: Perceived Usefulness (PU) scored 0.87, Perceived Ease of Use (PEU) scored 0.82, and Trust (TR) scored 0.85. Given that all values exceed the accepted threshold of 0.7, these results demonstrate that the survey items consistently measured their intended constructs within TAM.

To uncover the latent variables underlying TAM dimensions, Exploratory Factor Analysis (EFA) was performed, supported by two preliminary tests:

1. Bartlett's Test of Sphericity: Bartlett's Test of Sphericity yielded statistically significant results ($p < 0.001$), indicating that sufficient correlations exist between variables to justify factor analysis. This significance suggests that the TAM dimensions are likely interconnected, forming a solid foundation for factor extraction.
2. Kaiser-Meyer-Olkin (KMO) Test: Complementing this, the KMO measure, which assesses the adequacy of the sample for factor ana-

TAM Dimension	***Cronbach's Alpha***
Perceived Usefulness (PU)	0.87
Perceived Ease of Use (PEU)	0.82
Trust (TR)	0.85

Table 2: *Cronbach's Alpha of TAM Dimensions*

DOI 10.2440/013-0005

lysis, produced an overall score of 0.79, well above the minimum acceptable value of 0.6. Together, these tests confirmed that the data met the criteria for factor analysis, ensuring that the extracted factors accurately represented the underlying structure of user perceptions.

Exploratory Factor Analysis (EFA) subsequently identified three principal factors with eigenvalues greater than 1, each corresponding to a TAM dimension. The first factor, Perceived Usefulness (PU), captured aspects of safety, efficiency, and cost savings, accounting for 38% of the total variance. This factor reflects how users associate AI-SHT with security and economic benefits, highlighting that these technologies offer more than mere convenience to users in the targeted age groups. The second factor, Perceived Ease of Use (PEU), focused on users' perceived simplicity in learning and interacting with the technology, explaining 24% of the variance. The emphasis on ease of use suggests that intuitive design and accessible interfaces are significant user considerations. Finally, the third factor, Trust (TR), captured user concerns about data security and transparency, contributing 18% to the variance. This dimension underscores the importance of trust in the brand and data management practices, particularly among younger respondents, who prioritized privacy and transparency.

Spearman's rho was employed further to understand the relationships between TAM dimensions and age-based variables, focusing on the associations between ordinal features. With a significance level set at 0.05, the analysis revealed high positive correlations among several constructs, particularly among the Millenials. For example, the correlation between PU1 (Safety) and PU3 (Saving) was notably strong (rho = 0.76), indicating that Millenials view financial savings and safety as complementary benefits of AI-SHT.

Nominal demographic variables, such as homeownership, were analyzed in relation to TAM dimensions using the Chi-square Test of Independence. This test identified significant associations, particularly between homeownership and User Attitude (UA) of the Millenials, where Cramer's V was calculated at 0.5 with a p-value less than 0.05. The strength of this association suggests that homeownership status significantly influences users' attitudes toward adopting AI-SHT, as millennial homeowners are more likely to see these technologies as worthwhile investments that enhance both property value and personal security.

Results

Factor analysis revealed three robust factors corresponding to Perceived Usefulness (PU), Perceived Ease of Use (PEU), and Trust (TR), supporting TAM as a framework for understanding technology adoption.

Table 3 highlights the factor loadings for each TAM construct across the two age groups, reflecting the importance assigned to different factors within each construct. Notably, Perceived Usefulness

Table 3: *Factor Loadings of TAM Constructs based on age groups*

TAM Construct	Gen Z (Factor Loadings)	Millennials (Factor Loadings)
Perceived Usefulness (PU)	• Safety (0.68) • Cost Savings (0.62) • Efficiency (0.70)	• Safety (0.80) • Cost Savings (0.76) • Efficiency (0.82)
Perceived Ease of Use (PEU)	• Ease of Learning (0.75), • Clear Interaction (0.78)	• Ease of Learning (0.65) • Clear Interaction (0.69)
Trust (TR)	• Data Security (0.73), • Transparency (0.71)	• Data Security (0.70) • Transparency (0.75)

DOI 10.2440/013-0005

(PU) shows higher loadings on safety, cost savings, and efficiency for Millenials, suggesting that these features are particularly valued. Perceived Ease of Use (PEU) shows slightly higher importance for clear interaction with the provider of AI-SHTs and ease of learning among Gen Z. Trust (TR) maintains strong loadings across both age groups, Millenials and Gen Z.

The test of the hypotheses showed the following results

H1: Perceived Usefulness (PU) positively influences User Attitude (UA) toward AI-based smart home technologies across all age groups, with older groups emphasizing security and cost-saving benefits more.

Perceived Usefulness (PU) and User Attitude (UA) showed a significant positive correlation of 0.67 ($p < 0.001$) across all age groups, indicating that PU strongly influences UA in smart home technology adoption. Gen Z users demonstrated the highest perceived benefits, particularly in PU1 (Safety) and PU3 (Saving), with a correlation of 0.76 and $p < 0.001$. Cronbach's Alpha for PU is 0.944, confirming high internal consistency and reliability for PU across items, including safety and efficiency. Thus, H1 is approved, with PU significantly influencing UA, especially among the Millennials. This supports the idea that security and cost efficiency are primary motivators for Millennials adopting smart home technologies.

H2: Perceived Ease of Use (PEU) positively impacts User Attitude (UA), particularly among Gen Z users, who are more likely to adopt if the technology is intuitive and easy to learn.

PEU showed a significant positive correlation with UA at 0.63 ($p < 0.001$). Specifically, Gen Z users rated PEU4 (Clear Interaction) and PEU3 (Ease of Learning) highly, with a strong positive correlation of 0.70 ($p < 0.001$). Factor analysis identified that Ease of Learning and Intuitive Interaction was highly loaded on Factor 2 (PEU), confirming that ease of use features significantly contribute to positive Gen Z user attitudes. The KMO score of 0.9198 for PEU components further validated sampling adequacy for factor analysis, strengthening the reliability of findings. Thus, H2 is approved, as data confirms that Gen Z users, in particular, value ease of learning, transparency, and intuitive use, which positively impacts their attitude toward adopting smart home technologies.

H3: Trust (TR) in data security and brand transparency significantly influences adoption, particularly in the youngest age group, where privacy concerns are heightened.

Trust (TR) was significantly correlated with UA at 0.55 ($p = 0.002$) across both age groups, strongly emphasizing Gen Z users. TR3 (Transparency) and TR1 (Data Privacy) were highly loaded on Factor 3 (Trust), indicating these items are primary trust determinants. For Gen Z users, trust variables showed high significance, with TR3 (Transparency) correlated with UA at 0.64 ($p < 0.001$), reflecting younger users' focus on data security and transparency. The trust variable TR2 (Company Trust) had a significantly positive coefficient of 1.10 ($p < 0.001$), underscoring trust's impact on attitude across demographics, especially among younger users. Thus, H3 is approved, as the data shows that trust in transparency and data security significantly drives UA, particularly for younger users who prioritize data privacy.

H4: Age is a moderating factor in the relationship between TAM dimensions (PU, PEU, TR) and User Attitude (UA), with Millenial users showing the strongest purchase intention for technologies that enhance home value and safety.

The Chi-square Test of Independence and Cramer's V were used because Age showed a significant association with TAM dimensions: PU ($\chi^2 = 48.6$, $p < 0.001$), PEU ($\chi^2 = 36.9$, $p = 0.002$), and

TR (χ^2 = 30.4, p = 0.006). Cramer's V: PU and Age (0.34), PEU and Age (0.28), and TR and Age (0.23) suggest moderate associations, confirming age's role as a moderator. Millennial users showed the highest scores in PU-related factors such as safety and cost savings, indicating a preference for utility-driven benefits. Meanwhile, Gen Z users are strongly associated with PEU and TR dimensions. Thus, H4 is approved, with age significantly moderating TAM dimensions, where Millennial users show the highest UA based on safety and cost savings, while younger users value usability and trust. This age-based preference confirms the moderating effect of age in TAM-based adoption behavior.

Discussion

The results of this study underscore the importance of age as a moderating variable in the adoption of AI-SHT, with each age group displaying distinct preferences and priorities within the Technology Acceptance Model (TAM) dimensions. This understanding of age-specific preferences extends the TAM framework, providing evidence that age as a demographic factor plays a substantial role in shaping perceived usefulness (PU), perceived ease of use (PEU), and trust (TR) in relation to technology acceptance.

For Gen Z consumers, ease of learning and clear interaction with the provider of AI-SHT were paramount. Factor analysis showed that ease of use (PEU) had the highest factor loading for this age group, with PEU3 (Ease of Learning) scoring 0.71, highlighting the preference for intuitive, low-effort interactions. Additionally, trust (TR) emerged as a significant determinant, particularly TR3 (Transparency), with a correlation of 0.43 between transparency and trust scores, confirming that this group prioritizes privacy and security measures. The findings of this study confirm the importance of trust (TR) in the context of privacy, trust in the provider of AI-SHTs, and transparency (Chin et al., 2024; Choung et al., 2023). Incorporating user experience (UX) design that emphasizes easy onboarding, clear communication, and transparent data privacy practices is essential to meeting the expectations of Gen Z users, whose purchasing decisions are often motivated by convenience and perceived safety and trust. The findings of this study confirm the importance of trust (TR) in the context of privacy, trust in the provider of AI-SHTs, and transparency (Chin et al., 2024; Choung et al., 2023).

In contrast, Millennials prioritize practical benefits like safety, saving, and efficiency. A strong correlation (0.76) was observed between PU1 (Safety) and PU3 (Saving) among Millenials, confirming that they view these technologies as dual-purpose tools that can enhance both home security and economic efficiency. The correlation between these two PU items highlights the convergence of security and cost-saving motivations, who often manage household responsibilities and finances. This preference for multifunctional benefits supports TAM's assertion that perceived usefulness drives adoption, extending the model by emphasizing that utility perceptions vary based on life stage. Marketing strategies targeting this age group should emphasize long-term investment benefits, family safety, and household cost savings, which align with their practical orientation and enhance the appeal of AI-based technologies. This finding suggests that marketing strategies targeting millennials may benefit from emphasizing the dual advantages of security and cost efficiency.

Conclusion

The purpose of this quantitative study was to examine the factors influencing the age-based adoption of AI-SHTs among Chinese millennials and Gen Z consumers. To the authors' knowledge, this is the first age-based study about adopting AI-SHTs for consumers of these two age groups. The factor model exhi-

DOI 10.2440/013-0005

bits high explanatory power, collectively accounting for 72% of the variance in consumer intention to adopt AI-SHT among Gen Z and Millenial consumers in China. The findings of this study suggest an extension of TAM by demonstrating that age groups do not simply differ in degree within TAM constructs but diverge in the emphasis and meaning of these constructs. Tailored strategies addressing each group's unique motivations and constraints, particularly those highlighted by factor analysis, are vital for increasing adoption, satisfaction, and sustained engagement with AI-SHT.

This study contributes to science by advancing the understanding of TAM's applicability across age groups identifying specific factors for AI-SHT through factor analysis and correlation testing. Practical implications were identified for product managers, marketers, and policymakers. Creating user-friendly designs is essential for product designers to engage Gen Z users, while systems targeting Millennial users should emphasize practical functionality and safety benefits. For marketers, safety features and financial savings are effective motivators for Millennial users, whereas transparency and privacy hold particular importance for Gen Z users. Policymakers can foster trust, especially among Gen Z adopters, by implementing regulations prioritizing data security and privacy protection.

This study has certain limitations that suggest avenues for further research. First, the study design is cross-sectional, lacking longitudinal data that would allow for tracking changes in AI-SHT adoption patterns over time. Such data could illuminate shifts in technology perceptions and adoption motives across generational lines as AI-SHTs evolve. Additionally, while this study focuses on TAM constructs, it excludes potentially influential factors like social influence, perceived risk, and socio-economic status, which are known to impact consumer technology adoption but were omitted here to maintain focus on core variables. Future research should examine these elements to better understand their role within this demographic. Lastly, while the sample captures age-based differences, it does not account for broader

Author Contact Information

Correspondence regarding this article should be directed to T. Kuziaev at timur.kuziaev@student.eim.education.

Conflict of (Competing) Interest

The authors declare that they have no (competing) financial or non-financial interests related to this study.

Funding

The authors self-funded the research, and no external funding was obtained for its completion.

Author Contributions

T. Kuziaev contributed to the manuscript's conception, design, data collection, analysis, and drafting of the manuscript. M. Neubert supervised the research, provided critical feedback, and guided the interpretation of results and manuscript revisions. Both authors reviewed and approved the final version of the manuscript and agreed to be accountable for all aspects of the work.

Acknowledgments

None.

Data Availability and Supplementary Material

All data generated and analyzed during this study and supplementary material are available upon reasonable request.

Prior Publication

The authors confirm that this research has not been published previously and is not under consideration for publication elsewhere.

Ethics Statement

This study complies with the ethical guidelines of the European Code of Conduct for Research Integrity and adheres to the GDPR requirements for data protection. Ethical approval was obtained from the Institutional Review Board of EIM, and informed consent was secured from all participants.

Responsible AI Ethics Statement

This study used artificial intelligence (AI) tools to support tasks such as identifying relevant literature, analyzing datasets, and editing textual content. These tools were employed solely to enhance efficiency, and their outputs were critically reviewed to ensure alignment with research objectives. The use of AI adheres to ethical principles outlined in the EU AI Act, the OECD AI Principles, and the UNESCO Recommendation on the Ethics of Artificial Intelligence, emphasizing transparency, fairness, and accountability. The authors made all final decisions and retain full responsibility for this research's integrity, rigor, and conclusions.

demographic diversity within the target age groups, such as educational background, regional differences, and household characteristics, which could further nuance AI-SHT adoption behaviors. Investigating these additional demographic factors in future studies could yield richer insights into the motivations and barriers influencing Chinese Millennials and Gen Z consumers.

References

Ali, K., & Freimann, K. (2021). *Applying the Technology Acceptance Model to AI decisions in the Swedish Telecom Industry* (Master's thesis). Blekinge Institute of Technology, Sweden.

Chang, S.E., Liu, A.Y., Shen, W.C. (2017). User trust in social networking services: A comparison of facebook and linkedin. *Computers in Human Behaviour, 69*, 207–217. https://doi.org/10.1016/j.chb.2016.12.013

Chen, H. (2019). *Success factors impacting artificial intelligence adoption: Perspective from the Telecom Industry in China* (Doctoral dissertation). Old Dominion University, USA.

Chi, T. (2018). Understanding Chinese consumer adoption of apparel mobile commerce: An extended TAM approach. *Journal of Retailing and Consumer Services, 44*, 274-284. https://doi.org/10.1016/j.jretconser.2018.07.019

Chin, C. H., Wong, W. P. M., Cham, T. H., Thong, J. Z., & Ling, J. P. W. (2024). Exploring the usage intention of AI-powered devices in smart homes among millennials and zillennials: the moderating role of trust. *Young Consumers, 25*(1), 1-27. https://doi.org/10.1108/YC-05-2023-1752

China Daily. (2023, July 13). *Smart home device market set to expand in China*. China Daily. https://www.chinadaily.com.cn/a/202307/13/WS64af2a9ba31035260b8160f4.html

Choudhary, S., Kaushik, N., Sivathanu, B., & Rana, N. P. (2024). Assessing Factors Influencing Customers' Adoption of AI-Based Voice Assistants. *Journal of Computer Information Systems*, 1-18. https://doi.org/10.1080/08874417.2024.2312858

Choung, H., David, P., & Ross, A. (2023). Trust in AI and its role in the acceptance of AI technologies. *International Journal of Human–Computer Interaction, 39*(9), 1727-1739. https://doi.org/10.1080/10447318.2022.2050543

Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Q. 13* (3), 319–340. https://doi.org/10.2307/249008

Davis, F. D. (1986). *A technology acceptance model for empirically testing new end-user information systems: Theory and results* (Doctoral dissertation). Massachusetts Institute of Technology, Sloan School of Management, USA.

ElSayad, G., & Mamdouh, H. (2024). Are young adult consumers ready to be intelligent shoppers? The importance of perceived trust and the usefulness of AI-powered retail platforms in shaping purchase intention. *Young Consumers.* Vol. ahead-of-print No. ahead-of-print. https://doi.org/10.1108/YC-02-2024-1991

Ismatullaev, U. V. U., & Kim, S. H. (2024). Review of the factors affecting acceptance of AI-infused systems. *Human Factors, 66*(1), 126-144. https://doi.org/10.1177/00187208211064707

Ji, W., & Chan, E. H. (2019). Critical factors influencing the adoption of smart home energy technology in China: A Guangdong province case study. *Energies, 12*(21), 4180. https://doi.org/10.3390/en12214180

Kelly, S., Kaye, S. A., & Oviedo-Trespalacios, O. (2023). What factors contribute to the acceptance of artificial intelligence? A systematic review. *Telematics and Informatics, 77*, 101925. https://doi.org/10.1016/j.tele.2022.101925

Leung, L., & Cheung, M. (2024). The effects of technology readiness, risks, and benefits on smart home technology adoption: extending the Theory of Planned Behavior model. *Media Asia,* 1-22. https://doi.org/10.1080/01296612.2024.2330771

Li, W., Yigitcanlar, T., Erol, I., & Liu, A. (2021). Motivations, barriers and risks of smart home adoption: From systematic literature review to conceptual framework. *Energy Research & Social Science, 80*, 102211. https://doi.org/10.1016/j.erss.2021.102211

Neubert, M., & Van Der Krogt, A. S. (2019). Decision-makers impact on the internationalization of high-technology firms in emerging markets. *Journal of Global Entrepreneurship Research, 9*(1), 70. https://doi.org/10.1186/s40497-019-0195-x

Rafique, H., Almagrabi, A. O., Shamim, A., Anwar, F., & Bashir, A. K. (2020). Investigating the acceptance of mobile library applications with an extended technology acceptance model (TAM). *Computers & Education, 145*, 103732. https://doi.org/10.1016/j.compedu.2019.103732

Schaefer, S., Ashu, F., & Neubert, M. (2021). The impact of GDP and governance on venture capital investments for the period 2010-2019 (after the financial crisis and before the Covid-19 pandemic). *International Journal of Teaching and Case Studies, 12*(3), 219-232. https://doi.org/10.1504/IJTCS.2021.117967

Valencia-Arias, A., Cardona-Acevedo, S., Gómez-Molina, S., Gonzalez-Ruiz, J. D., & Valencia, J. (2023). Smart home adoption factors: A systematic literature review and research agenda. *Plos one, 18*(10). https://doi.org/10.1371/journal.pone.0292558

Yu, X., Ye, Y., Chen, B., Yan, S., & Wu, S. (2024). Why do users switch to smart homes? A push-pull-mooring framework. IEEE *Access, 12*, 80646 - 80656. https://doi.org/10.1109/ACCESS.2024.3409158

Zhang, Y., Seviset, S., & Piromgarn, T. (2024). Causal Factors of Acceptance Smart Home Technology System Among Adolescents in Zhengzhou, Henan. *Revista de Gestão Social e Ambiental, 18*(1). https://doi.org/10.24857/rgsa.v18n1-056

Instructions for Authors

We welcome submissions of original research articles, review essays, and other scholarly contributions relevant to the scope of the European Journal of Management, Leadership and Health Care. Authors are requested to follow the guidelines below to ensure a smooth review and publication process.

1. Article Processing Charge (APC)

The journal operates under an open access publishing model. All articles are made freely and permanently available to readers upon publication. To ensure long-term sustainability and maintain high standards of quality, authors are required to contribute a modest article processing charge (APC).

2. Manuscript Submission

Manuscripts must be submitted electronically via email to: jml@meducation.de
All submissions must include:

- A cover letter introducing the article and confirming originality
- The manuscript in Word
- A separate file with author information (see section 5)

3. Language

Manuscripts must be written in clear, concise English (British or American spelling is acceptable, but please use one consistently). Authors who are not native English speakers are encouraged to have their manuscript professionally proofread prior to submission. The title and abstract must also be provided in German and Chinese.

4. Formatting Requirements

- Font: Calibri, 11 pt
- Line spacing: 1.5
- Margins: 2.5 cm (1 inch) on all sides
- As part of the European Accessibility Act (EAA), please use MS Word layout templates to structure the content. In this context, please also describe the graphics using text alternatives.
- Referencing style: APA
- Please include page numbers

5. Manuscript Length

- Research articles should typically range between 5,000 and 8,000 words, excluding abstract, notes, and references.
- Review essays or conceptual papers may be up to 6,000 words, depending on scope.
- Book reviews should not exceed 1,500 words.
- The editorial team may consider longer or shorter submissions if appropriately justified by content and relevance.
- Please include a word count at the end of the manuscript.

6. Author Information

Submit a separate title page containing:

- Full name(s) of the author(s)
- Institutional affiliation(s)
- Email address(es)
- ORCID iD (if available)
- Short biographical note (max. 100 words per author)

The manuscript itself must be anonymized for double-blind peer review.

7. Abstract and Keywords

Provide an abstract of up to 200 words and 3–6 keywords. The abstract should summarize the article's main arguments and contributions.

8. Figures and Tables

- All figures and tables must be inserted at the appropriate position within the manuscript file.
- Additionally, all figures must be submitted as separate files in one of the following formats: JPG, PNG, or PDF.
- Ensure that all images are of sufficient resolution (minimum 300 dpi for print-quality reproduction).
- Each figure must be numbered consecutively (e.g., Figure 1, Figure 2) and accompanied by a descriptive caption (Accessibility).
- Indicate the approximate placement of each figure in the text (e.g., [Figure 1 about here], if needed).

9. Open Access and Copyright

All articles are published Open Access under the Creative Commons Attribution 4.0 International License (CC BY 4.0). Authors retain copyright of their work. Authors are responsible for obtaining permission to reproduce any third-party material and must provide proper attribution in the figure caption or a separate note.

10. Review Process

All submissions undergo double-blind peer review by at least two reviewers. Authors will receive feedback within approximately 8–12 weeks.

11. Publication Ethics

The journal adheres to the principles of academic integrity. Plagiarism, duplicate publication, or data falsification will result in rejection.

12. Contact

For any questions regarding the submission process, please contact the editorial team at: publishers@meducation.de