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Socioeconomic Inequality and Digital Literacy in the Age of AI: Understanding the Greek Divide

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Socioeconomic Inequality and Digital Literacy in the Age of Artificial Intelligence: Mapping the Greek Divide through the AI Socio-Digital Inequality Framework (ASDIF)

Κοινωνικοοικονομική Ανισότητα και Ψηφιακός Γραμματισμός στην Εποχή της Τεχνητής Νοημοσύνης: Εμπειρικά Δεδομένα από την Ελλάδα

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Abstract

In light of artificial intelligence (AI) adoption, this study investigates the link between socioeconomic inequality and digital literacy in Greece. Although artificial intelligence is becoming more and more integrated into daily life, its penetration varies across socioeconomic groups, reflecting documented patterns of unequal access and use in digital environments (van Dijk, 2020; Helsper, 2012), therefore producing varied experiences of access, knowledge, and empowerment. Based on qualitative information gathered from doctoral study (removed for blind review), this study investigates how people from various socioeconomic levels view, understand, and engage with AI technologies.

The results show that in artificial intelligence, digital literacy is a kind of social capital influencing involvement in the digital economy rather than only a technological ability. Individuals from higher socioeconomic backgrounds demonstrate more frequent and diversified use of artificial intelligence across both professional and personal contexts. Individuals from lower socioeconomic backgrounds tend to experience artificial intelligence in more constrained and indirect ways, often through automated or institutional systems (van Deursen & van Dijk, 2019). This imbalance helps to create a layered pattern of technological adoption whereby inequality is maintained rather than lowered.

The study presents the AI Socio-Digital Inequality Framework (ASDIF), which maps people across two main axes: socioeconomic capital and digital literacy, and adds emotional orientation as a third dimension to help understand this phenomenon. The

framework helps us to see how perceived control, curiosity, and fear affect our interaction with artificial intelligence in an orderly manner.

The research adds to the body of knowledge by presenting digital literacy as a socially embedded concept and by providing a context-specific examination of Greece, a nation where technological acceptance is influenced by institutional inertia, economic downturn, and cultural attitudes toward technology. The results point out that initiatives tackling not just access but also awareness, trust, and inclusion in artificial intelligence ecosystems are necessary policies.

Keywords

Artificial Intelligence, Digital Literacy, Inequality, Education, Greece, AI Adoption, Social Divide

Περίληψη

Υπό το πρίσμα της επιταχυνόμενης υιοθέτησης της Τεχνητής Νοημοσύνης (ΤΝ), η παρούσα μελέτη διερευνά τη δομική συσχέτιση μεταξύ της κοινωνικοοικονομικής ανισότητας και του ψηφιακού εγγραμματισμού στο ελληνικό τοπίο. Παρόλο που η ΤΝ ενσωματώνεται ολοένα και περισσότερο στις λειτουργικές διαστάσεις της καθημερινότητας, η διείσδυσή της παραμένει δυσανάλογη μεταξύ των διαφόρων κοινωνικοοικονομικών στρωμάτων, δημιουργώντας αποκλίνουσες εμπειρίες πρόσβασης, γνωστικής κατάκτησης και συστημικής ενδυνάμωσης. Βασιζόμενη σε ποιοτικά δεδομένα που προέκυψαν από διδακτορική διατριβή (Data derived from the author's doctoral research (omitted for blind review). Omitted for blind review), η έρευνα εξετάζει τον τρόπο με τον οποίο άτομα από διαφορετικά κοινωνικοοικονομικά υπόβαθρα αντιλαμβάνονται, εννοιολογούν και αλληλεπιδρούν με τις τεχνολογίες ΤΝ.

Τα εμπειρικά αποτελέσματα καταδεικνύουν ότι, στο πεδίο της Τεχνητής Νοημοσύνης, ο ψηφιακός εγγραμματισμός λειτουργεί ως μια μορφή κοινωνικού κεφαλαίου που καθορίζει τη συμμετοχή στην ψηφιακή οικονομία, υπερβαίνοντας τον ορισμό του ως απλή τεχνική δεξιότητα. Άτομα που ανήκουν σε υψηλότερα οικονομικά στρώματα επιδεικνύουν εκτεταμένη χρήση της ΤΝ τόσο στην επαγγελματική όσο και στην προσωπική τους σφαίρα. Αντίθετα, άτομα από

χαμηλότερα κοινωνικοοικονομικά υπόβαθρα βιώνουν συνήθως την ΤΝ μέσω παθητικών μορφών, οι οποίες συχνά χαρακτηρίζονται από μηχανισμούς επιτήρησης, αυτοματοποίηση και συστημικό αποκλεισμό. Η εν λόγω ανισότητα προωθεί ένα διαστρωματωμένο πρότυπο τεχνολογικής υιοθέτησης, όπου οι προϋπάρχουσες ανισότητες αναπαράγονται αντί να αμβλύνονται.

Η μελέτη εισάγει το Πλαίσιο Κοινωνικο-Ψηφιακής Ανισότητας στην ΤΝ (ASDIF), το οποίο χαρτογραφεί τα υποκείμενα σε δύο κύριους άξονες: το κοινωνικοοικονομικό κεφάλαιο και τον ψηφιακό εγγραμματισμό. Επιπλέον, ενσωματώνει τον συναισθηματικό προσανατολισμό ως μια τρίτη διάσταση για τη διευκόλυνση μιας πολυεπίπεδης κατανόησης του φαινομένου. Το πλαίσιο αυτό αποσαφηνίζει τον τρόπο με τον οποίο η αντιλαμβανόμενη αυτενέργεια, η πνευματική περιέργεια και η τεχνοφοβία επηρεάζουν συστηματικά την αλληλεπίδραση ανθρώπου-ΤΝ.

Η παρούσα έρευνα συμβάλλει στην υπάρχουσα βιβλιογραφία εννοιολογώντας τον ψηφιακό εγγραμματισμό ως ένα κοινωνικά ενσωματωμένο οικοδόμημα και παρέχοντας μια ανάλυση προσαρμοσμένη στο πλαίσιο της Ελλάδας — μιας δικαιοδοσίας όπου η τεχνολογική αποδοχή μετριάζεται από τη θεσμική αδράνεια, την οικονομική μεταβλητότητα και τις διακριτές πολιτισμικές στάσεις απέναντι στην καινοτομία. Τα αποτελέσματα υπογραμμίζουν την αναγκαιότητα χάραξης πολιτικών που υπερβαίνουν την απλή πρόσβαση σε υποδομές, δίνοντας προτεραιότητα στην επίγνωση, τη θεσμική εμπιστοσύνη και την ουσιαστική συμπερίληψη στα οικοσυστήματα της ΤΝ.

1.Introduction

Including artificial intelligence into daily life has hastened in many fields including education, governance, consumption, and communication. Though AI is spreading quickly, knowledge of and access to it vary widely. These inequalities are not arbitrary. They mirror current social and economic systems that influence how people view, understand, and utilize new technology.

This unequal distribution is particularly observable in contexts such as Greece, where structural constraints related to digital policy, education, and economic instability shape technology adoption (European Commission, 2023; OECD, 2021). The nation

offers a special environment where institutional inertia, fragmented digital policies, and financial catastrophe meet. Consequently, artificial intelligence is often experienced as externally imposed, particularly when individuals interact with it through institutional or automated systems rather than through active use (Selwyn, 2021) applied via administrative procedures, automated systems, and platforms rather than as a participation tool. This perspective shapes resistance as well as adoption.

Studies on digital inequality mostly concentrated on technology access, sometimes known as the first-level digital divide, and on talents, sometimes known as the second-level divide (van Dijk, 2020). But the emergence of artificial intelligence brings up a third dimension that hasn't been used enough yet. This dimension is about being able to understand, make sense of, and really think about how algorithms work. It goes beyond mere technical abilities into the field of social and cognitive consciousness.

Digital literacy is shown in this research as a kind of social capital in artificial intelligence. Based on Bourdieu's (1986) model, money encompasses symbolic power and cultural knowledge rather than just financial assets. From this angle, artificial intelligence literacy serves as a tool to identify who may navigate, profit from, and affect digital environments. While some people are passive recipients of the results of artificial intelligence, others with this kind of capital may actively interact with it.

The Greek case reflects broader patterns of unequal distribution of digital capital observed across European contexts (van Dijk, 2020; Helsper, 2012) this kind of wealth is distributed. Reflec,ting more general structural issues in digital education across Europe, artificial intelligence-related skills have been unevenly incorporated into university courses (European Commission, 2023; OECD, 2021). In the Greek environment, awareness of artificial intelligence remains uneven and often mediated through public discourse rather than direct experience (Cave et al., 2019; Fast & Horvitz, 2017) and typically filtered through public debate rather than actual experience. The author's DBA study (omitted for blind review) revealed that people often see artificial intelligence as an abstract and externally imposed system rather than a tool for participation. This emphasizes a symbolic gap between users and technology, in which institutional power is linked with artificial intelligence rather than individual agency is stressed.

Adoption of artificial intelligence technologies, however, varies among socioeconomic categories. Higher-income people interact with artificial intelligence via financial tools, smart devices, and professional programs. On the other hand, poorer groups interact with artificial intelligence by way of automated customer service, filtering algorithms, and monitoring systems. This unevenness produces various versions of technical interaction in which the same system can empower some while excluding others.

The research looks at how digital literacy interacts with socioeconomic inequality to affect AI adoption in Greece in order to close this gap. It gathers actual experiences and views using qualitative data, therefore transcending hypothetical analysis. Based on these results, it presents the AI Socio-Digital Inequality Framework (ASDIF), which offers a systematic approach to examine people's attitudes inside the artificial intelligence environment.

This study makes two sorts of contributions. First, it reframes digital literacy as a socially embedded construct rather than a purely technical skill. Second, it presents an evidence-based framework that reflects the complexity of AI adoption given institutional and financial limitations in a setting. Doing so helps us better grasp how artificial intelligence era inequality is created anew.

2. Literature review

2.1 Perception of Artificial Intelligence and Public Awareness

Public knowledge of artificial intelligence is still erratic and somewhat split. Research on AI shows that public perceptions of artificial intelligence are frequently shaped through indirect exposure rather than direct interaction (Cave et al., 2019; Fast & Horvitz, 2017). This includes things like news reports, social media stories, and how it is shown in popular culture (Cave et al., 2019; Fast & Horvitz, 2017). This secondary exposure helps to create what some could call "constructed familiarity," in which people feel informed but not functionally knowledgeable about artificial intelligence technologies.

Research shows that more difference between what we think we know and what we actually know is linked to more worry and emotional suffering. Research especially reveals that insufficient understanding of how artificial intelligence technologies work raises the probability of anxiety, mistrust, and opposition to adoption (Longoni et al.,

2019). This is in line with the larger body of research on technology acceptance, which shows that seen complexity and a lack of openness lower trust and desire to participate (Venkatesh et al., 2003).

This dynamic seems clearer in the Greek setting. Omitted for blind review, data from the data derived from the author's doctoral research (omitted for blind review) show that a sizable percentage of subjects only have a limited awareness of artificial intelligence applications. Respondents often link artificial intelligence with abstract or far-off ideas rather than daily tools, which further supports the view of artificial intelligence as outside of their daily life. This view helps to create a kind of cognitive dissonance in which artificial intelligence (AI) is viewed as a disruptive outside force rather than as an ingrained socio-technical system.

2.2 AI fear, confidence, and emotional reactions

Attitudes toward artificial intelligence are mostly formed by emotional reactions. Early models of technology adoption stressed logical decision-making; however, more recent studies underline the need of emotional reactions like worry, ambiguity, and felt danger (Brougham & Haar, 2018). Particularly important construct is AI anxiety, which describes unpleasant emotional reactions brought about by the expectation or existence of artificial intelligence systems.

Research reveal that worries about employment displacement, loss of control, and privacy breaches frequently aggravate AI-related anxiety (Acemoglu & Restrepo, 2020; Zhang & Dafoe, 2019). These worries are not spread uniformly throughout society. People with less education or digital skills are more likely to say they are anxious because they are less able to understand and judge how well technology works (Van Deursen & van Dijk, 2014).

Data derived from the author's doctoral research (omitted for blind review) support this trend. Participants often voiced worries about data monitoring and algorithmic decision-making as well as anxiety about automation replacing human work. Importantly, these anxieties were not always founded on personal experience. Rather, they were molded by seen lack of control and scant awareness of how artificial intelligence systems function. This bolsters the idea that interpretive ability—not just exposure—determines AI fear.

In this connection, trust seems to be a mediator. According to studies, trust in artificial intelligence (AI) systems relies on seen transparency, dependability, and fairness (Glikson & Woolley, 2020). But when people don't have the information they need to judge these qualities, trust development is shaky. In such instances, cognitive assessment is often overshadowed by emotional reactions, which results in either excessive reliance on or entire rejection of artificial intelligence technologies.

2.3 Digital literacy as social capital

Originally a technical skillset, digital literacy has grown into a larger sociocultural competence. Ng (2012) now includes the capacity to analyze, critique, and actively interact with digital systems, including artificial intelligence. This change shows how increasingly acknowledged it is that technical participation depends on the ability to properly utilise and comprehend digital tools, not only on access.

Bourdieu (1986) helps one to think of digital literacy as a kind of cultural capital. It gives people symbolic power in online environments, which helps them move through systems, make good choices, and have some control. AI literacy is hence an addition to digital literacy and serves as a major indicator of involvement in AI-mediated settings.

The uneven distribution of this kind of wealth helps create fresh types of inequity. While others interact with these systems passively or under circumstances of limited control, studies reveal that people with higher educational achievement and more access to technology are more likely to profit from AI applications (Selwyn, 2021). This stratifies the landscape such that the same technology yields different results based on the user's degree of literacy.

Greek background data lends credence to this assertion. According to data derived from the author’s doctoral research people with more education and professional exposure to technology show more confidence and less anxiety while interacting with AI. Conversely, those with little exposure are more likely to see AI as forced than co-created, therefore exacerbating emotions of alienation and lack of control.

2.4 Layered AI Adoption and Socioeconomic Injustice

Established is the connection between technological adoption and wealth. But with artificial intelligence, this link gets more complicated. Adoption of artificial intelligence is fundamentally different among lower socioeconomic classes, not just delayed. People engage with artificial intelligence via many platforms, settings, and degrees of control.

Higher-income people tend to interact with AI via customized and empowering applications including financial tools, smart home systems, and professional automation. On the other hand, those with less money often see AI in ways that are hard to understand or that limit what it can do, like automated customer service systems, surveillance technology, and algorithmic filtering in job markets.

This difference causes what could be called multi-level adoption. Rather than a straight split between users and non-users, artificial intelligence participation runs along a spectrum defined by access, literacy, and application setting. Empirical evidence from the doctoral dataset backs this structure. Although participants from poorer socioeconomic levels said they had little direct contact with artificial intelligence tools, they said they often saw artificial intelligence-driven systems in institutional environments. This imbalance supports the idea of AI as dominating rather than enabling.

These results support more general criticisms of digital inequality, which hold that technology systems can exacerbate and replicate already-existing societal hierarchies (Eubanks, 2018). Here, artificial intelligence operates as a socio-technical system enmeshed in current power hierarchies rather than as a neutral instrument.

Emerging studies imply that artificial intelligence systems can replicate and exacerbate existing societal inequities, especially when access, knowledge, and control are unevenly distributed (Eubanks, 2018; Couldry & Mejias, 2019).

3. Methodology

3.1 Research Methodology

This research uses a mixed-methods approach to capture both the scope and depth of public ideas of artificial intelligence. Quantitative and qualitative methods together help to provide a more complete picture of how people understand, experience, and react to artificial intelligence systems in their daily life.

The quantitative element is a systematic questionnaire answered by 318 people in Greece. The study aimed to gauge emotional reactions, levels of AI awareness, behavioral intentions, and perceived knowledge. Including age, education, and socioeconomic level helps to investigate their effects on AI acceptance and attitudes. Through 20 semi-structured interviews, the qualitative element enhances the survey results. These interviews aimed to probe more deeply participants' personal perceptions, interpretations, and emotional reactions to artificial intelligence. This method helps to find patterns that might not be completely caught by numbers alone.

3.2 Sampling and Data Collection

Online channels were used to find participants for the quantitative survey, which guarantees a varied sample with regard to age, level of education, and employment background. The sample offers a wide cross-section of the Greek populace, therefore enabling the investigation of demographic differences in attitudes about artificial intelligence.

Purposive sampling was used to choose the qualitative sample in order to represent a range of viewpoints across several levels of digital literacy and socioeconomic background. Semi-structured interviews let respondents freely express their opinions while keeping consistency throughout the main subject areas.

Throughout the research process, ethical issues were discussed. Participation was optional; every respondent knew why the study was being conducted. Data were anonymized to guarantee secrecy.

3.3 Analytical Strategy

Descriptive and inferential statistical techniques were applied to quantitative data to find trends and correlations among the factors. Special consideration was given to how demographic variables help to determine AI knowledge and emotional reactions. Thematic analysis helped to evaluate qualitative data. This included going through coding interviews and looking for patterns in how people understood things, reacted emotionally, and felt they could control AI systems. Combining qualitative and quantitative data enables a more sophisticated understanding of the data.

3.4 The Artificial Intelligence Socio–Digital Inequality Framework (ASDIF)

Drawing on the results of this study, the Artificial Intelligence Socio–Digital Inequality Framework (ASDIF) is offered as a conceptual framework for grasping how people interact with artificial intelligence in various social settings.

Table 1: *AI Socio–Digital Inequality Framework (ASDIF)*

	Low Digital Literacy	**High Digital Literacy**
Low Socioeconomic Capital	**Quadrant 1: Passive Exposure** - Limited understanding of AI - High anxiety and uncertainty - Interaction through imposed systems (e.g. automated services, surveillance) - Low perceived control	**Quadrant 2: Constrained Adaptation** - Basic functional use of AI - Partial understanding - Selective engagement when necessary - Moderate anxiety
High Socioeconomic Capital	**Quadrant 3: Assisted Usage** - Access to AI tools but reliance on external guidance - Functional but not strategic use - Moderate confidence - Mixed emotional response	**Quadrant 4: Empowered Engagement** - High understanding and critical awareness - Strategic use of AI tools - Low anxiety, high trust - Strong sense of control

The AI Socio–Digital Inequality Framework places people along two main lines: digital literacy and financial resources. These elements interact to define how artificial intelligence is seen, understood, and used in daily life.

The horizontal axis shows how much money, education, and access to resources a person has, which is called socioeconomic capital. Digital literacy is the capacity to comprehend, assess, and interact with digital systems—including artificial intelligence—shown along the vertical axis.

People living in the lower-left quadrant have artificial intelligence in a passive and frequently forced way. Without a thorough awareness of how these systems operate, their engagement with AI mostly takes place via institutional mechanisms including

algorithmic decision-making or automated customer service. This lack of knowledge increases worry and lowers perceived control. This pattern is supported by empirical data from the doctoral dataset, which shows that people in this group report confusion, uncertainty, and a feeling of being left out.

Individuals with little financial means but great levels of digital literacy are represented in the upper-left quadrant. These people can use AI tools when needed, but their involvement is limited by the way things are set up. Their knowledge lessens severe anxiety, but uncertainty lingers because of limited access and possibilities.

The lower-right quadrant is home to people with better socioeconomic status but less digital knowledge. Though they have access to artificial intelligence tools, their application is practical rather than strategic. Their moderate confidence and varied emotional responses come from their dependence on outside systems or support to negotiate artificial intelligence settings.

The most favorable location is the upper-right quadrant. People in this group have a lot of money and are also good at using computers. This helps them use artificial intelligence in a smart way. They show more confidence, less worry, and a better feeling of control. This group is more likely to benefit from AI technologies and integrate them effectively into professional and personal contexts.

Emotional orientation is a third dimension that crosses over all four quadrants. This dimension records the spectrum from terror and worry to confidence and curiosity. Emotional reactions result from the interplay of wealth and literacy; they are not autonomous. Higher literacy promotes more balanced and informed interaction, whereas lower literacy usually relates with fear-driven responses.

The ASDIF framework therefore operates not only as a descriptive tool but as a conceptual model that explains how structural inequality, cognitive capacity, and emotional orientation jointly shape AI engagement patterns.

3.5 Theoretical contribution of ASDIF framework

Extending current digital divide models, the ASDIF model goes beyond access-based justifications and adds emotional and interpretative aspects. This system explains how people encounter technology whereas conventional models emphasize whether they have access to it.

Combining Bourdieu's idea of capital with current research on digital literacy (Bourdieu, 1986; Van Dijk, 2020) helps the model to explain in a systematic way why artificial intelligence reinforces rather than reduces inequality. It also confirms current criticisms of data-driven systems, which emphasize how technical infrastructures can reinforce current power imbalances (Eubanks, 2018; Selwyn, 2021).

4. Findings

4.1 Superficial Awareness and Designed Knowledge

According to the study, the data indicate that respondents often demonstrate a limited or fragmented understanding of artificial intelligence of artificial intelligence. Most respondents said they knew what the word "AI" meant, but their explanations were often wrong and didn't really make sense. This result supports earlier studies showing that public views of artificial intelligence often depend on media portrayals rather than direct interaction or technical expertise (Fast & Horvitz, 2017; Cave et al., 2019).

Quantitative data reveal that many respondents connect artificial intelligence with future or abstract ideas instead of mundane uses. This disconnect implies that, even if people frequently interact with AI-driven systems, artificial intelligence is cognitively positioned as far from daily life. Longoni et al. (2019) have reported comparable results showing that observed knowledge does not always correspond to real understanding or acceptance.

Qualitative information also reinforce this pattern. Indicating an externalized view of the technology, participants frequently defined artificial intelligence as "something advanced" or "something utilized by businesses." This supports the idea of created awareness, whereby indirect contact—rather than significant interaction—defines familiarity.

4.2 Fears About Artificial Intelligence and Perceived Threat

The findings indicate the presence of strong emotional responses, particularly anxiety and uncertainty. These feelings are strongly tied to recognized dangers connected to artificial intelligence, including loss of control, job displacement, and privacy issues as well as other threats. Existing research on automation anxiety and technology

disturbance (Brougham & Haar, 2018; Acemoglu & Restrepo, 2020) support this conclusion.

Quantitative analysis reveals that greater levels of perceived AI complexity are linked to more anxiety. This backs earlier research indicating that a lack of openness and knowledge magnifies unpleasant emotional reactions (Glikson & Woolley, 2020). Those with little understanding of artificial intelligence were more likely to be worried about its effects on society.

Qualitative results offer more thorough understanding of these emotional reactions. While some respondents voiced concerns about data collection and algorithmic decision-making, others expressed anxiety about automation causing job losses. These worries mirror bigger society arguments regarding digital governance and monitoring (Zuboff, 2019).

Importantly, these anxieties were mostly based on observed ambiguity rather than on actual bad experiences. This implies that, as a mediating element, digital literacy is even more important since it shows that interpretative gaps rather than real interaction drive AI anxiety.

4.3 Active vs. Passive Artificial Intelligence Involvement

The data underline a sharp difference between forms of artificial intelligence interaction that are passive and active. Higher educated and digitally literate respondents said they used artificial intelligence technologies to improve decision-making and productivity. Conversely, people with less literacy mostly interacted with AI via institutional or automated systems like algorithmic filtering or customer service platforms.

This difference points to wider trends found in digital inequality research, where access alone does not define outcomes but rather the capacity to properly use and interpret technology (Van Deursen & van Dijk, 2014; Selwyn, 2021). While passive users view AI as enforced and opaque, active users show agency and control.

This separation is further emphasized by the doctoral dataset. While some participants with professional experience with digital technologies found artificial intelligence to be "useful" and "efficient," others referred to it as "confusing" or

"unavoidable." This divergence implies that prior knowledge, skills, and setting define involvement with artificial intelligence as much as access does.

4.4 Educational and Socioeconomic Factors Driving

The study provides evidence supporting the idea that demographic factors have a major influence on how AI is seen. Important indicators of both understanding and emotional reaction are age, education, and socioeconomic level. These results corroborate earlier studies demonstrating that, across groups, digital literacy is unevenly dispersed (Ng, 2012; Van Dijk, 2020).

Higher educated participants showed less anxiety and more confidence using AI systems. People from poorer socioeconomic backgrounds, on the other hand, showed more uncertainty and mistrust. Bourdieu, 1986 argues that AI literacy is a kind of cultural capital that affects how people use digital spaces.

These results point to a stratified, not consistent, pattern in artificial intelligence adoption. Previous studies on digital inequality show that technology use is influenced by cognitive as well as socioeconomic resources (Helsper, 2012; van Deursen & van Dijk, 2019). The author's doctoral research (not included for blind review) further shows that people with limited access to digital tools usually come across AI passively through automated systems, while more privileged groups actively interact with AI through professional, financial, and everyday uses. This multilayered experience makes clear how the same technology framework can both support exclusion and promote engagement.

5. Discussion

The results of this research show that in Greece artificial intelligence is not uniformly experienced as socially neutral, as its interpretation varies across different social and educational contexts or universally understood technology. Rather, it is seen in pre-existing disparities in education, digital literacy, social status, and impression of institutional trustworthiness. The present study's contribution mostly rests on this point. The Greek example demonstrates that popular knowledge of artificial intelligence cannot be boiled down to a basic division between those who utilize technology and those who do not. A more accurate view is that various social groups

experience artificial intelligence in very different states of emotional security, agency, and awareness. The research contends in this respect that Greece's AI divide is not simply technological. It is social, emotional, and interpretative.

The study's first significant contribution is its separation of knowledge from understanding. Although they could recognize some AI-related activities in current society, the information indicate that a substantial proportion of respondents reported familiarity with the concept of artificial with the phrase "artificial intelligence," but this knowledge was often superficial and sporadic. This outcome is particularly significant given that public debate often uses knowledge as a stand-in for readiness. The results call into question this belief. People may have heard of artificial intelligence, used apps with artificial intelligence, or even benefited from algorithmic personalization, but they still don't know how these systems work, what kind of information they use, and how they affect their decision-making. This difference between symbolic knowledge and actual grasp is quite important. It sets up a situation whereby people are exposed to technology systems but lack the interpretative tools needed to evaluate them properly and critically. Similarly, studies already done have found that familiarity with digital technologies does not always lead to significant literacy or informed participation (Van Dijk, 2020; Selwyn, 2021). This gap seems to be one of the primary ways in which anxiety and doubt are repeated in the current research.

Another significant contribution is related to the emotional aspect of artificial intelligence involvement. The findings of the study suggest that negative feelings toward artificial intelligence include anxiety, suspicion, fatalism, and moral unease are not arbitrary sentiments or irrational reactions. These are repeated reactions that are more pronounced in people who have less trust in technology, less support from their teachers, and less access to knowledge that can explain why things happen. This builds on previous research on artificial intelligence anxiety by situating emotional responses inside a bigger social structure instead of only as personal-level psychological predispositions (Brougham & Haar, 2018; Glikson & Woolley, 2020).

In the Greek context, artificial intelligence is often experienced as distant or externally imposed, a perception consistent with broader patterns of digital inequality, where differences in access, skills, and use shape how technologies are understood and

adopted (van Dijk, 2020; Selwyn, 2021). This is a vital interpretive move. Once AI is perceived as operating outside one's field of comprehension, it also becomes easier to perceive it as threatening, manipulative, or morally suspect. Therefore, anxiety in this study should not be read narrowly as technophobia. It is better understood as a socially produced response to opacity, exclusion, and asymmetrical power.

The concept of passive exposure, developed through the findings, is particularly important here. A substantial number of participants did not primarily experience AI as a tool they had chosen, configured, or strategically used. Instead, they encountered it through interfaces and systems already imposed upon everyday life, such as algorithmic filtering, automated service procedures, data collection mechanisms, recommendation systems, and institutional digital infrastructures. This distinction between active and passive engagement helps explain why some groups describe AI as useful and efficient while others describe it as distant and intrusive. Active engagement presupposes at least a minimum level of literacy, agency, and benefit recognition. Passive exposure, by contrast, creates contact without empowerment. It makes individuals subject to AI systems without making them participants in their logic. This interpretation aligns with wider critiques of digital infrastructures as unequal systems of mediation, where technological participation often masks uneven power relations (Eubanks, 2018; Zuboff, 2019).

This interpretation aligns with extended conceptualisations of digital capital, where access to data, technological understanding, and algorithmic awareness become key forms of power within contemporary digital societies (Ragnedda, 2018; Couldry & Mejias, 2019). Drawing on Bourdieu's framework, the results indicate that the ability to understand and confidently navigate AI-related systems operates as a stratifying resource. Those who possess it enjoy greater interpretive control, lower fear, and more instrumental use of AI. Those who lack it are more likely to interpret AI through suspicion, generalized fear, or moral distance. In this sense, AI literacy is not a narrow technical skill. It is a socially distributed competence that affects who feels entitled to understand technology, who feels able to question it, and who remains dependent on others to interpret it. The Greek evidence strongly supports this view. Participants with higher educational attainment and greater exposure to digital tools were more likely to place AI within a framework of utility, adaptation, and opportunity. Those

with weaker educational or technological backgrounds more often framed AI as something externally imposed and insufficiently explained. This interpretation is consistent with research showing that digital participation depends not only on access but on broader constellations of skills, resources, and institutional support (Ng, 2012; Van Deursen & van Dijk, 2014).

The study's framework reveals that digital literacy and socioeconomic status affect emotional attitude toward artificial intelligence and are not unrelated. It comes from their interaction instead. Digital literacy has been conceptualized as a key determinant of meaningful participation in digital environments, influencing individuals' ability to interpret, evaluate, and use technological systems effectively (Ng, 2012; Selwyn, 2021). People with low levels of both socioeconomic resources and digital literacy are more likely to be affected by artificial intelligence (AI) in the form of fear, bewilderment, and limited perceived agency. Those who have better literacy and more resources are more likely to be curious, confident, and strategically involved. This is a patterned rather than a definitive argument. It provides insight into why society views artificial intelligence often seem divided. That polarisation could represent varying roles in a socio-digital arena as opposed to just variations in attitude or temperament. As such, the framework in theory combines emotional reaction into models of digital inequality. Conventional ideas on the digital divide usually cover outcomes, access, and skills. The current research contends that emotional orientation should also be regarded as a significant layer since it determines whether people approach artificial intelligence with openness or withdraw from it via suspicion and avoidance.

The conclusions also have ramifications for discussions on trust. In many AI debates, trust is regarded as a characteristic to be produced by more ethical design, more openness, or better performance. Although these are still vital, the current research implies that trust should also be seen as culturally shaped. People tackle artificial intelligence from various perspectives. People who have often experienced institutional dishonesty, financial instability, or educational exclusion are less likely to trust technology that looks complicated, powerful, and not well explained. This is very important in Greece because in a country influenced by economic crisis, bureaucratic tiredness, and erratic institutional trust, artificial intelligence systems are entering

public and corporate life. Under such circumstances, confidence in artificial intelligence cannot be built only on the technological level. Furthermore, it has to be constructed at the institutional and conversational level. If technology systems are viewed as replacing human judgment, increasing social distance, or moving power even further from average citizens, public trust will remain fragile.

The results also address more general European and world literature. While the Greek example has particular historical and cultural aspects, the basic process discovered in this research probably applies well beyond Greece. Many countries find themselves in a situation when public knowledge of artificial intelligence is growing more slowly than its expansion. Without the literacy help required to interact with them critically, many groups are urged to embrace algorithmic systems in companies, services, education, healthcare, and government. As such, the Greek case serves as a good illustration of a more general trend from an analytical point of view. It suggests that the future of artificial intelligence use depends on more than just innovation ability. It also concerns whether social structures can give people the cognitive and emotional tools they need to live with intelligent technologies in circumstances of agency, understanding, and dignity.

This is why the study has very significant practical ramifications. The first effects are on education. Knowledge of artificial intelligence should not be limited to technical fields or top-tier digital tracks. As a civic skill, it ought to be included in more general public education. Citizens should be informed about the definition of artificial intelligence, what it is not, how it processes data, where it shows up in daily life, and how it affects decision-making. The next effect is communication-related. Media and organizations must move away from sensationalized or abstract depictions of artificial intelligence and toward society-based explanation. Public stories that swing from utopian promise to dystopian danger heighten confusion rather than solve it. The third conclusion is in law. In unequal communities, ethical artificial intelligence governance has to consider not only theoretical ideals like fairness and openness but also whether systems are comprehensible and contestable for people with varied levels of knowledge and access. If only the most educated or socially fortunate can properly grasp the technologies shaping our lives more and more, a society cannot claim to be inclusively digital.

At last, the study offers theoretically by reframing the Greek artificial intelligence divide as one of uneven participation in technological meaning-making. The problem covers more than just who owns devices, who uses platforms, or who gains financially. The problem is also who gets to question it, who stays outside the interpretive circle in which technology power is explained and normalized, and who gets to understand AI as part of their world. Once this is understood, digital inequality in the era of artificial intelligence seems not only like a technological development gap but also as a democratic and cultural concern.

6. Conclusions and Implications

The purpose of this research was to investigate how public views and acceptance of artificial intelligence in Greece are influenced by digital literacy and economic disparity. The results reveal that in the Greek environment, artificial intelligence is more than just a question of technology implementation. It really boils down to emotional reaction, interpretative ability, and social status. The data reveals that a lack of knowledge about artificial intelligence is strongly linked to worry, mistrust, and passive involvement; therefore, awareness of artificial intelligence does not assure significant knowledge. As a result, the research says the Greek artificial intelligence gap should be seen as a socio-digital disparity rather than just a basic delay in modernization.

One of the main findings of the survey is that social groups have different experiences with artificial intelligence. Individuals with higher levels of education and digital literacy were more likely to report active and confident engagement with AI system, more confidence in using computers, and more access to information about how to understand AI are more likely to use it in active and smart ways. With more control, they are better able to identify advantages, evaluate risks, and include AI into daily decisions. People with less knowledge of computers and less social support, on the other hand, often see AI as forced, unclear, and upsetting emotionally. Their contacts with artificial intelligence are sometimes not voluntarily but rather integrated into business or institutional structures they do not totally grasp. This asymmetry is important since it shows that, through the extremely conditions in which people

experience and interpret it, AI can replicate current inequalities not just through outcomes but also.

Another finding is that, rather than a small technical ability, digital literacy should be seen as a kind of social and civic readiness. According to the research, understanding artificial intelligence, challenging it, and fitting it into a significant societal framework serves as a defensive mechanism against resignation and fear. Where such literacy is lacking, even possibly helpful technologies may be viewed with distrust or apathy. This implies that in the era of artificial intelligence, digital literacy is not just about basic tool usage. It's about personal interpretation agency. It helps people go from just being exposed to information to actively participating in society. From this angle, digital literacy ought to be seen as component of democratic inclusiveness. If significant numbers of people are subjected to algorithmic systems they are meant to trust but are not capable of understanding, a society in which artificial intelligence becomes more and more integrated into governance, work, and services cannot stay socially cohesive.

The research also finds that emotional reactions to artificial intelligence are socially patterned and should be given careful consideration as part of technological research and policy. This research shows that distrust, uncertainty, and fear are not leftover or illogical factors. They are relevant reactions to inequitable access to explanation, unequal distribution of digital resources, and seen distance from systems of technological control. Public opposition to artificial intelligence, then, cannot be written off as ignorance, traditionalism, or basic misunderstanding. In many instances, it represents a reasonable reaction to ambiguity and absence of control. Because it changes the discussion, this finding has wider significance. The difficulties go beyond simply creating ethical, creative, or efficient artificial intelligence. It is to make it openly negotiable and socially readable.

The study's primary theoretical contribution is the creation of the AI Socio-Digital Inequality Framework. By combining three aspects frequently researched independently—socioeconomic capital, digital literacy, and emotional orientation—the ASDIF model extends the literature. Integrating these aspects helps the model to present a more subtle account of how adoption of artificial intelligence plays out in layered communities. It demonstrates that access-based or functionality-based

models alone are insufficient to fully grasp the implications of artificial intelligence. People's positions in the socio-digital sphere affect not just which artificial intelligence they come across but also how they interpret it and what meaning they give it. The framework thus gives a helpful perspective for future study in Greece and in other countries with varying levels of development, educational differences, and low trust in institutions.

Equally crucial are the practical consequences. The results clearly favor the inclusion of more general AI literacy programs in both formal and informal learning settings at the academic level. Such programs ought not be restricted to technical expertise, coding, or postgraduate education. They should have public-facing education that talks about how artificial intelligence works in simple language, where it shows up in daily life, what data practices it uses, and what rights people should have when they use systems that are powered by artificial intelligence. There is work to be done in schools, colleges, adult education systems, and community learning centers as well as in universities. The research indicates that rather than being presented as a one-size-fits-all technical message, this education ought to be ethically informed, socially based, and suited to varied groups.

The results suggest that at the policy level AI governance has to tackle disparity not only in outcomes but also in public knowledge. Regulation should therefore be combined with effective communication systems that reveal in practice rather than only in theory how algorithmic systems function. This includes better public information, simpler service design, better explanations of automated processes, and easier ways to ask questions or get help if AI systems affect people's lives. Policymakers need to understand that faith in AI depends on faith in the organizations supporting, controlling, and implementing it. Skepticism will still be warranted and widespread if AI comes into society by way of bureaucratic opacity, poor explanation, and unequal access to information.

The research indicates Greece has to change the way AI is told at the public communication level. Public debates usually vacillate between extreme optimism and extreme dread. Either extreme is dangerous. Overly celebratory stories mask disparities in literacy and access. Extremely terrible stories exacerbate distance and fear. Rather than framing people as either helpless victims or automatic beneficiaries

of technical advancement, what is required is a grounded communicative approach linking AI to daily experience, explaining possibilities and limits, and preventing framing of citizens as either helpless victims or automatic beneficiaries of technology progress. This affects public relations efforts, government communication plans, and media organizations.

The research also suggests ramifications for companies and service providers. Companies using artificial intelligence in consumer-facing or employee-facing environments must realize that acceptability relies on more than just performance or usability. Whether users see the system as fair, clear, and respectful of their agency also matters. Explanations ought to be more obvious and privacy controls more prominent where customers engage with artificial intelligence through personalization, automation, or recommendation systems. If these technologies are not to be viewed mostly through worry of replacement, support and education are crucial in cases where workers interact with artificial intelligence through automation or management systems. In other words, socially sustainable AI adoption calls for a relational strategy instead of just a technical one.

There are a number of restrictions to keep in mind. First, the study is interpretative in nature and does not seek to produce nationally representative statements about every part of the Greek population even if it is based on empirical evidence taken from the author's PhD thesis. Second, the study is unique to Greece and should so be applied with extreme care. Nonetheless, the processes found in the research, particularly the link between literacy, inequality, and emotional reaction, probably apply to many other situations. Third, future testing utilizing more general comparative and longitudinal study designs would help the framework created here.

These restrictions point out good paths for next study. A key approach would be to quantitatively evaluate the ASDIF model in bigger groups across several areas to see if the same quadrants and emotional patterns recur. Still another would be to contrast Greece with other Eastern or Southern European nations having similar structural limits but varying in institutional confidence, public discourse, or educational systems. Further investigation might also investigate how different social groups see particular artificial intelligence technologies, including public administration tools, healthcare

systems, or generative AI platforms. Such study would help to clarify whether the socio-digital divide varies according to the field of artificial intelligence application.

Future research should look at intervention outcomes as well. If transparency initiatives, public relations techniques, or digital literacy programs are implemented, how much do they lower anxiety and increase significant participation? This is especially crucial since the present research implies that ignorance is not a foregone conclusion. It is a socially created issue hence society can solve it. Determining whether more inclusive communication and educational systems can generate not only more awareness but also more balanced and confident forms of public interaction with AI would be aided by research tracking changes across time.

The final conclusion of this study is therefore both normative and empirical. Empirically, it demonstrates that in Greece artificial intelligence spreads along already existing lines of inequality and that digital literacy has a major influence on determining if AI is viewed as opportunity or threat. Normatively, it contends that a society dedicated to inclusive technical progress cannot concentrate just on infrastructure, invention, or adoption rates. It should also wonder who is familiar with the systems being implemented, who feels represented inside of them, and who is left out of the knowledge structures by which AI is made culturally acceptable. Justice is no longer just about distribution in the age of artificial intelligence. It also depends on understanding, participation, and interpretative ability.

If Greece intends to follow an inclusive artificial intelligence future, it will have to regard literacy, explanation, and public trust as fundamental aspects of digital transformation instead of as secondary issues. Just because artificial intelligence is effective or unavoidable will not make it socially acceptable. It will only be valid when people feel it can be understood, challenged, and lived with under circumstances of dignity and agency.

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