



The Right to Equality and Non-Discrimination in the Age of Artificial Intelligence: A Comparative Study of the Extent of Constitutional Protection in Jordan and France

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Abstract

This study examined the challenges artificial intelligence (AI) poses to the right to equality and non-discrimination through a comparative analysis of Jordan and France. It focused on "algorithmic discrimination" arising from biased data or algorithms, which threatens constitutional principles. The findings revealed that while Jordan provides general protection through its constitution and legislation, these measures are insufficient to address the complexities of AI, lacking specialized legislation and effective oversight bodies.

Conversely, France possesses an advanced framework encompassing a robust constitution, legislation such as the GDPR, and jurisprudence establishing algorithmic transparency principles, further strengthened by its integration within the European system and the AI Act. The comparison uncovered a significant protection gap between the two countries. Consequently, the research recommended enacting a specialized Jordanian AI law, updating existing legislation, and enhancing judicial capabilities. For France, it emphasized the rigorous enforcement of the AI Act and the development of transparency tools. The study also called for establishing international principles to combat algorithmic discrimination and strengthening the role of the United Nations.

The study concluded that guaranteeing digital equality necessitates proactive legal frameworks and adaptable constitutional interpretation that keeps pace with technological advancement.

Keywords: Equality, Non-Discrimination, Artificial Intelligence (AI), Algorithmic Discrimination, Algorithmic Transparency, Constitutional Protection, Proportionality

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Introduction

Contemporary societies are undergoing a fundamental transformation driven by the pervasive integration of artificial intelligence (AI) technologies into essential life domains—from employment and finance to healthcare and criminal justice. While this development promises enhanced efficiency and

decision-making, it presents profound challenges to entrenched constitutional principles, particularly the fundamental right to equality and non-discrimination (Calo, 2019). Algorithms, as the backbone of these systems, raise serious concerns regarding their potential to replicate existing human biases or generate novel forms of discrimination in invisible and systematic ways, often under the guise of purported technological neutrality (European Commission, 2020). This phenomenon, termed "algorithmic discrimination," constitutes a significant threat to fundamental human rights, demanding rigorous scrutiny of how existing legal and constitutional frameworks respond to this emerging challenge.

Constitutions have historically protected fundamental rights and liberties, serving as the ultimate safeguard for individuals against the arbitrariness of both public and private authorities. Confronting the complexities of AI, the central question arises: To what extent do constitutional texts and constitutional jurisprudence provide effective and adequate protection against novel forms of discrimination engendered by these technologies? (Huglo, 2021). This question assumes exceptional importance given the urgent need to balance technological innovation with the protection of human dignity and social justice. Addressing it necessitates a comparative approach highlighting similarities and differences in constitutional responses across diverse legal and cultural systems.

This research focuses on two distinct models: the Hashemite Kingdom of Jordan and the French Republic. Jordan, situated in the heart of the Middle East, possesses a constitution (The Constitution of the Hashemite Kingdom of Jordan of 1952, as amended) explicitly enshrining the principle of equality and non-discrimination in Article 6, while confronting specific developmental and social challenges amidst its pursuit of digital transformation (Al-Sharari, 2022). France, as a leading European nation with a rich constitutional tradition (Declaration of the Rights of Man and of the Citizen 1789, Constitution of the Fifth Republic 1958) and established judicial institutions (Constitutional Council), has witnessed significant legislative and jurisprudential developments concerning AI and the protection of fundamental rights against its encroachments, particularly following the landmark Constitutional Council Decision No. 2020-801 QPC, which emphasized the necessity of transparency and oversight in the public sector use of algorithms (Conseil constitutionnel, 2020).

Through this comparison, this research aims to achieve the following objectives: First, to analyze the nature and dimensions of the threats AI poses to the right to equality and non-discrimination in both countries. Second, to examine relevant explicit and implicit constitutional texts and the interpretative mechanisms employed by constitutional courts in Jordan and France to counter these threats. Third, to assess the effectiveness of these constitutional frameworks in providing practical protection within specific application contexts, such as automated hiring systems, credit scoring, or predictive policing. Finally, to derive lessons from both experiences to offer recommendations for strengthening constitutional protection in the AI era, both nationally and within the broader context of comparative legal discourse (Cath et al., 2023). The research hypothesis posits that constitutions, despite their inherent flexibility, require dynamic interpretation and vigilant judicial reasoning to keep pace with the unprecedented speed of technological advancement and ensure the right to equality and non-discrimination remains the cornerstone of any just democratic society.

Research Problem

The rapid development and pervasive integration of artificial intelligence (AI) technologies into essential life domains (employment, credit, security, justice, public services) pose fundamental challenges to the principles of equality and non-discrimination, cornerstones of modern constitutional systems and human rights. The central problematic of this research lies in uncovering the extent to which the existing constitutional frameworks in Jordan and France effectively protect the right to equality and non-discrimination against the novel and evolving risks created by the use of AI systems, while identifying shortcomings and proposing avenues for enhancing this protection.

On one hand, traditional constitutions, including the Jordanian Constitution of 1952 (amended) and the French Constitution of 1958 (amended), with their current texts—largely predating the complexities of algorithms and big data—lack explicit and detailed mention of AI challenges. Article 6 of the Jordanian Constitution stipulates equality before the law and non-discrimination, and Article 1 of the French Constitution affirms equality and non-discrimination. However, these provisions and others were designed in an era prior to algorithmic and big data complexities (Zuboff, 2019). This constitutional and legislative lacuna creates a gap between the abstract constitutional principle and the reality of application within contexts where consequential decisions may be made based on opaque or biased algorithms.

On the other hand, significant challenges arise in applying and enforcing these constitutional principles within the digital environment. These include interpreting concepts like "substantive equality" or "indirect discrimination" in the context of decisions made by automated systems? What constitutes sufficient constitutional safeguards against the phenomenon of algorithmic discrimination resulting from biases in the data used to train systems (Bias in Training Data), the design of the algorithms themselves, or a lack of transparency and accountability ("black box") (Wachter et al., 2017)? Furthermore, how can the necessities of technological innovation and efficiency be reconciled with the imperative to respect fundamental rights and prevent discrimination?

In France, despite a more developed legal and regulatory framework concerning data protection (partially grounded in Article 66-1 of the French Constitution regarding privacy protection in the digital age, added in 2008), and despite efforts within the context of European Union regulations like the AI Act, the effectiveness of constitutional mechanisms in detecting and preventing algorithmic discrimination remains questionable, particularly concerning judicial oversight of these complex systems (Veale & Borgesius, 2021). In Jordan, the constitutional and legal framework regulating AI use in general, and combating algorithmic discrimination in particular, is still in its nascent formative stages, thereby increasing the fragility of constitutional protection for equality in this domain (Al-Hussein, 2022).

Consequently, the problematic crystallizes in the following primary question:

To what extent do the constitutional frameworks in Jordan and France provide effective and adequate protection for the right to equality and non-discrimination against the unprecedented challenges posed by the proliferation and application of artificial intelligence systems?

And what are the possible avenues for enhancing this protection to align with the digital age?

This research seeks to answer this question through a critical comparative analysis of constitutional rules, implementation mechanisms, and oversight in both countries, assessing their responsiveness to the risks of algorithmic discrimination.

Research Methodology

This research employed a multi-level and multi-tool methodology to achieve its objectives of analyzing the constitutional protection of the right to equality and non-discrimination against AI challenges in Jordan and France:

1. Comparative Method: Forming the backbone of the research, this involved a systematic comparison between:

The Constitutional Framework: Analyzing texts of the Jordanian Constitution (The Constitution of the Hashemite Kingdom of Jordan 1952 and its amendments) and the French Constitution (Constitution of the Fifth Republic 1958 and its amendments, referencing the Preamble to the 1946 Constitution and the Declaration of the Rights of Man and of the Citizen 1789) concerning the principles of equality and non-discrimination. This includes defining the scope of protection, protected categories, and permissible limitations.

Legal and Institutional Responses: Comparing legislative responses (e.g., Jordanian Personal Data Protection Law No. 16 of 2023, France's proposed AI law, the EU GDPR and its impact on France), judicial responses (through analyzing rulings of the Jordanian Court of Cassation and the Supreme Administrative Court in Jordan, and the Council of State and Court of Cassation in France), and institutional responses (the role of Jordan's Telecommunications Regulatory Commission and the National Commission for Women, versus France's Commission National de l'Informatique et des Libertés - CNIL and the French Digital Council - CNNum).

2. Legal/Constitutional Analysis Method:

Textual Analysis: Scrutinizing relevant texts of constitutions, laws, and regulations in both countries to deduce provisions and protective principles, assessing their suitability for AI challenges.

Socio-Legal Analysis: Understanding the social and cultural context in which the constitutional and legal framework operates in each country, and how this context influences the interpretation and application of the equality principle against new technology (Al-Atoum, 2022).

Critical Analysis: Evaluating the effectiveness of the existing constitutional and legal framework in both countries in confronting AI-driven discrimination challenges, identifying gaps, limitations, and proposing development pathways.

Key Terms

Studying the constitutional framework of the right to equality and non-discrimination in the context of artificial intelligence (AI) requires precise definition of pivotal concepts forming the research core:

1. **Right to Equality:** Refers to the constitutional and legal principle mandating equal treatment of all individuals before the law without discrimination. This right is manifested in the Jordanian Constitution (Article 6) and the French Constitution (through references incorporating the Declaration of the Rights of Man and of the Citizen 1789, particularly Article 1) (National Center for Human Rights, 2020). In the AI context, it entails ensuring algorithms do not systematically deprive individuals or groups of opportunities or equal treatment.(Alshawabkeh, Shiyab,2022)

2. **Non-Discrimination:** Represents the negative aspect of the right to equality, prohibiting preferential treatment, favoritism, exclusion, or restriction based on constitutionally and legally prohibited grounds (e.g., sex, race, religion, political opinion, social origin in Jordan; or origin, sex, religion, opinion, disability in France). AI challenges this principle when its systems produce unintended or hidden discrimination (Barocas & Selbst, 2016).

3. **Algorithmic Discrimination:** Denotes unfair or biased outcomes produced by AI systems during data processing or decision-making, leading to disproportionately harmful effects on specific groups based on protected characteristics (Zarsky, 2020).

4. **Algorithmic Transparency:** Signifies the extent to which the functioning and decision-making processes of AI systems can be understood. Transparency is a prerequisite for accountability and essential for detecting and addressing potential algorithmic discrimination. The tension between algorithmic transparency and protecting trade secrets poses a significant challenge to effective oversight (Veale & Zuiderveen Borgesius, 2021).

5. **AI Fairness:** A concept referring to the pursuit of justice in the outcomes and impacts of AI systems across different population groups (Binns, 2023).

6. **Constitutional Protection:** Mechanisms and procedures provided by the constitutional document to safeguard fundamental rights, including the right to equality and non-discrimination. This protection in both countries includes:

Judicial Review: The power of the Constitutional Court in Jordan and the Constitutional Council in France to monitor the constitutionality of laws and regulations to protect rights (Jordanian Constitutional Court, 2022).

Evolutionary Constitutional Interpretation: The ability of constitutional courts to interpret constitutional texts to protect rights in ways that accommodate new challenges like those posed by AI.

Positive Obligations: The state's duty, derived from constitutional principles, not only to refrain from discrimination (negative obligation) but also to take effective action to prevent discrimination by third parties (including AI system developers and operators) and ensure substantive equality.

7. **Regulatory Framework:** The set of laws, regulations, policies, and standards designed to guide the development, deployment, and use of AI systems. An effective framework seeks to balance innovation with the protection of fundamental rights, such as equality and non-discrimination. The EU AI Act is a

prominent example impacting France (Veale & Zuiderveen Borgesius, 2021), while Jordan is exploring developing its national frameworks.

8. Proportionality: A fundamental legal and constitutional principle (explicitly enshrined in the French Constitution and implicitly in Jordanian judicial practice) requiring that any measures limiting rights (e.g., privacy or freedom of trade) be appropriate, necessary to achieve a legitimate aim (e.g., preventing discrimination or protecting security), and not impose a disproportionate burden relative to the intended benefit. This principle is carefully applied to regulatory constraints on AI to ensure rights protection without unjustifiably stifling innovation.

Conceptual and Theoretical Framework

The Right to Equality and Non-Discrimination: Constitutional and Legal Evolution and Theoretical Foundations

The right to equality and non-discrimination constitutes the cornerstone of human rights systems and the modern rule of law, having undergone dynamic development at the constitutional and legal levels in Jordan and France, profoundly shaping the concept of justice itself. In Jordan, Article 6 of the Constitution of 1952 (amended) affirms that "Jordanians shall be equal before the law. There shall be no discrimination between them as regards to their rights and duties on grounds of race, language or religion," thereby enshrining the principle of formal legal equality from its inception (Al-Hourani, 2023). Subsequent constitutional amendments and judicial practice, particularly by the Constitutional Court, have reinforced this principle, with increasing focus on ensuring equal opportunities. In France, the principle of equality has held a paramount position since the Declaration of the Rights of Man and of the Citizen of 1789 (Article 1), a foundational principle of the Republic. This principle has evolved profoundly through successive French constitutions (1946, 1958) and the fundamental principles recognized by the laws of the Republic and constitutional jurisprudence, culminating in the pivotal role of the Constitutional Council in its interpretation and development (Dupré de Boulois, 2022).

The distinction between formal legal equality and substantive equality is crucial for understanding contemporary challenges. Formal equality, as embodied in the early constitutional texts of both countries, focuses on identical treatment for all before the law, without regard to actual differences or socio-economic circumstances that may hinder certain groups from effectively benefiting from these rights. Substantive equality, a more advanced evolution, requires positive state intervention to address existing disparities and empower historically marginalized or vulnerable groups to achieve genuine equality of opportunity and outcome (Fredman, 2021). In France, concepts like "positive measures" or "affirmative action" (now Article 1 of the French Constitution) embody substantive equality. In Jordan, the need for this shift is evident in areas like women's representation and geographic discrimination, though practical implementation still faces challenges (Center for Defending Freedom of Journalists [CDFJ], 2024).

To achieve these two levels of equality, law and jurisprudence in both systems prohibit multiple forms of discrimination:

1. **Direct Discrimination:** Less favorable treatment of a person compared to another in a similar situation based on a prohibited ground (e.g., sex, race, religion, disability), whether explicitly or implicitly. Example: Refusing to hire a woman because of her sex.
2. **Indirect Discrimination:** More insidious, occurring when a seemingly neutral provision, criterion, or practice puts persons with a particular protected characteristic at a particular disadvantage compared to others, unless objectively justified by a legitimate aim and the means are appropriate and necessary. Example: Requiring a minimum height for a job not genuinely requiring it, which often excludes women.
3. **Structural (or Institutional) Discrimination:** The most complex, referring to patterns of inequality embedded in the social, economic, political, and institutional structures of society. These patterns lead, automatically or through the interaction of multiple practices, to the systematic and persistent exclusion or marginalization of specific groups, even in the absence of explicit discriminatory intent (International Labour Organization [ILO], 2023). This form requires deep analysis of social contexts and the adoption of comprehensive reform policies.

Crucially linked to uncovering these forms, especially indirect and structural discrimination, is the issue of the burden of proof in discrimination cases. Historically, the burden rested entirely on the victim to prove discrimination, often a difficult task. Legislation in France (Equality and Anti-Discrimination Law) and Jordan (Cybercrimes Law and Rights of Persons with Disabilities Law, albeit incompletely) have adopted systems alleviating this burden. It is sufficient for the plaintiff to present "facts or evidence giving rise to a presumption" of discrimination (*prima facie* discrimination), shifting the burden to the defendant (employer, service provider) to prove that the act was for objective and legitimate reasons unrelated to the prohibited ground (European Commission, 2022). This shift in the burden of proof constitutes a vital legal tool for empowering victims and combating hidden discrimination.

Artificial Intelligence: Concept, Applications, and Risks to Rights

The current era witnesses rapid advancements in artificial intelligence (AI), broadly defined as the capability of computer systems to perform tasks typically requiring human intelligence, such as learning, problem-solving, decision-making, and pattern recognition. These systems fundamentally rely on machine learning algorithms, particularly deep learning, enabling machines to "learn" automatically from vast amounts of data without explicit programming for each task (Russell & Norvig, 2020). AI applications impacting individuals and societies are diverse, with prominent examples directly relevant to rights:

1. **Automated Screening/Classification:** Used in resume screening for jobs (e.g., Applicant Tracking Systems - ATS), creditworthiness assessment, and sorting applications for social welfare or immigration (Eubanks, 2018). These systems analyze applicant data to predict suitability.
2. **Recommendation Systems:** Controlling the information and opportunities individuals encounter, such as those used on job platforms (recommending job opportunities), social media platforms (determining content display), and shopping platforms (determining suggested products) (Noble, 2018). These systems shape individuals' perceptions and determine their opportunities based on past behaviors and group patterns.

3. Automated Assessment and Prediction: Used in employee performance evaluation, crime prediction ("predictive policing"), and risk assessment in the judicial sector (e.g., recidivism risk assessment tools) (Angwin et al., 2016). These applications raise core questions about fairness and objectivity.

Sources of AI Bias:

AI bias does not arise in a vacuum; its sources are multiple and intertwined:

1. **Data Bias:** Data is the "fuel" for AI systems. If the historical data used for training reflects prior discrimination (e.g., underrepresentation of certain groups, inclusion of discriminatory human decisions) or contains societal stereotypes, the algorithm will learn and reproduce this bias, often amplifying it (Buolamwini & Gebru, 2018). A stark example is facial recognition systems showing significantly lower accuracy for women and people with darker skin tones due to lack of diversity in training data.
2. **Algorithmic Bias:** Algorithmic designs themselves can encode bias. They may assign disproportionate weight to variables historically or statistically correlated with protected groups (e.g., zip code as an indirect proxy for race or economic status), or fail to capture the complexities of human and social context.
3. **Design and Context Bias:** Systems are built by teams that may lack sufficient diversity, leading to the overlooking of important perspectives or flawed assumptions about users (Benjamin, 2019). Furthermore, the narrow commercial or security goals for which systems are designed may overshadow considerations of fairness and equity.
4. **Application and Use Bias:** Even theoretically "neutral" systems can be applied in discriminatory ways. They may be used in inappropriate contexts, their outputs interpreted with bias by humans, or employed to reinforce existing discriminatory policies or practices (Citron, 2022).

Challenges of the "Black Box" and Accountability Difficulty:

Bias risks are exacerbated by the nature of many AI systems, particularly deep learning, which often function as "black boxes." It is difficult, if not impossible, to understand precisely how the system arrives at a particular decision or recommendation from the given inputs (Pasquale, 2015). This creates significant challenges for:

Accountability: Who is legally responsible for a discriminatory decision: the algorithm designer? the data provider? the end user? Difficulty in tracing hinders liability assignment.

Review and Appeal: How can an individual adversely affected by an automated decision effectively challenge it if they cannot understand its reasons or prove bias?

Transparency and Oversight: It is difficult for regulators and civil society to assess the fairness and effectiveness of these systems without the ability to examine their internal logic.

AI as an Amplifier of Structural Discrimination:

The danger of AI lies not only in creating new individual discrimination but also in its capacity to reinforce and deepen existing structural discrimination within society. With its inherent biases and

capacity for large-scale automated processing, AI can become a powerful tool for entrenching and lending spurious scientific legitimacy to systemic inequalities based on race, sex, class, or geographic location (O'Neil, 2016; Eubanks, 2018). When automated systems are deployed in sensitive areas like employment, lending, policing, justice, and welfare, they risk institutionalizing historical and social biases, making them a "natural" and invisible part of institutional processes. This makes combating them harder and undermines the fundamental constitutional principle of equality and non-discrimination.

Legal Theoretical Frameworks: Applying Constitutional Principles in the Digital Sphere

Protecting the right to equality and non-discrimination against AI challenges requires adopting flexible legal theoretical frameworks capable of accommodating the specificities of the digital environment. Three main theories form the foundation for analysis and regulation in this context:

Firstly: The Legal Theory of Equality in Digital Application:

The core constitutional principles of equality and non-discrimination, as enshrined in Article 6 of the Jordanian Constitution and Article 1 of the French Declaration (incorporated into the French constitutional bloc), remain the bedrock of protection. However, formal legal equality prohibiting overt discrimination may be insufficient to counter the unintended or hidden discrimination produced by AI systems learning from data containing historical or social biases (Barocas & Selbst, 2016). A shift towards the concept of "substantive or effective equality" is required. This concept aims to achieve fair and equitable outcomes and ensure genuine equality of opportunity in accessing services and opportunities governed by algorithms, such as employment, credit, or healthcare (Cath et al., 2018). The application of this concept manifests in imposing obligations on AI developers and operators to avoid biases and ensure fairness in outcomes.

Secondly: The Theory of Digital Governance: Transparency, Accountability, and Algorithmic Fairness:

This theory aims to establish mechanisms for the good governance and management of AI systems, based on key pillars:

1. **Transparency:** Signifies the possibility of understanding how systems work and make decisions, or at least the ability to audit them. Given the complexity of AI systems, full transparency is difficult ("black box"). Therefore, modern legal approaches focus on "actionable transparency" or "explainability," providing affected individuals with sufficient information to understand the essential reasons for a decision concerning them and to contest it if necessary (Wachter et al., 2017).
2. **Accountability:** Refers to identifying the parties legally responsible for harms or discrimination caused by AI systems and subjecting them to oversight and sanction mechanisms. This requires a legal framework defining oversight during the design, development, and deployment stages of these systems and imposing effective complaint and redress mechanisms for victims (Selbst, 2021).
3. **Algorithmic Fairness:** Represents the practical essence of the equality principle in this context. It is a complex concept related to measuring and avoiding unfair biases in system outcomes. Multiple mathematical and procedural definitions of fairness exist (e.g., group fairness vs. individual fairness,

fairness in outcomes vs. opportunities), with no single agreed-upon definition, posing significant legal and regulatory challenges (Barocas et al., 2019). The goal remains embedding fairness considerations as a core requirement throughout the AI development and deployment lifecycle.

Thirdly: Risk Management Theory and the Precautionary Principle:

This principle states that where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation or harm to human rights (Marchant, 2020). Applied to the field of AI and equality, this necessitates proactively assessing the risks of bias and discrimination before deploying systems, especially in sensitive domains (e.g., justice, employment, healthcare). It requires adopting preventive measures like mandatory bias testing, independent audits, and potentially restricting or prohibiting the use of certain high-risk AI types in sensitive areas until their safety and fairness are proven (Veale & Borgesius, 2021). Adopting this principle is essential for protecting fundamental rights in the face of technological uncertainty.

These three theories are strongly interconnected: Equality is the supreme goal; digital governance provides the procedural tools (transparency, accountability, fairness) to achieve it; and risk management and the precautionary principle constitute the proactive approach necessary to prevent harm in an environment characterized by uncertainty. Together, they form the essential theoretical framework for building effective constitutional protection against algorithmic discrimination in Jordan and France.

Constitutional and Legal Protection of Equality and Non-Discrimination in Jordan and France

The constitutional and legal framework constitutes the fundamental pillar for guaranteeing the right to equality and preventing discrimination, particularly in confronting the new challenges posed by the AI era. This section aims to analyze and evaluate this framework in both Jordan and France, focusing on its adequacy in addressing digital and automated discrimination.

I. The Constitutional and Legal Framework in Jordan

1. **Constitutional Texts:** The Constitution of Jordan (1952, as amended) establishes the principle of equality in Article 6, stating: "Jordanians shall be equal before the law. There shall be no discrimination between them as regards to their rights and duties on grounds of race, language or religion." This article is the cornerstone of protection against discrimination (Jordanian Constitution, 1952). Despite the clarity of the text, the absence of explicit mention of potential grounds for discrimination in the digital sphere (e.g., personal data, algorithmic outcomes) or indirect discrimination leaves room for interpretation in light of technological developments.

2. **Judicial Interpretation:** The Jordanian Constitutional Court has contributed to clarifying the scope of protection emanating from Article 6. In its Decision No. (2/2018), it affirmed that the equality principle "requires that the rule be the same for all persons subject to it in similar circumstances, and that the law shall not discriminate between them based on an unreasonable and unjust criterion" (Jordanian Constitutional Court, 2018). In other rulings, it has interpreted the concept of "discrimination" to include unequal treatment without objective justification. However, the Court has not yet directly and precisely

addressed cases of discrimination stemming from AI algorithms or big data processing, indicating an urgent need for future judicial jurisprudence in this area.

3. National Legislation:

Civil Service Law (No. 9 of 2020): Stipulates the principle of equality in opportunities, appointment, and promotion (Article 4) and prohibits discrimination (Article 5). However, it does not address the risks of algorithmic discrimination in initial screening or evaluation processes if automated systems are used, representing a gap in light of the public administration's digital transformation (Al-Omour, 2023).

Labour Law (No. 8 of 1996 and amendments): Prohibits discrimination in employment based on sex, race, or religion (Article 2). Yet, its effectiveness against digital discrimination is limited. It does not explicitly regulate the use of potentially biased recruitment systems nor impose transparency regarding the algorithms used (Al-Khatib, 2021).

Cybercrimes Law (No. 15 of 2019): This is the most relevant legislation concerning the digital sphere. It criminalizes online defamation and slander (Articles 11, 12) and incitement to discrimination or hatred (Article 13). Strengths: Criminalizing hate speech and incitement to discrimination online. Weaknesses: It does not directly address structural or systemic discrimination resulting from algorithms or AI, focusing instead on overt individual behaviors. The lack of a clear definition of digital discrimination also limits its effectiveness in this context (Al-Shawabkeh, 2022).

4. Recent Trends and New Legislation: Jordan currently lacks comprehensive legislation specifically regulating AI use or explicitly prohibiting algorithmic discrimination. National initiatives like the "Jordan AI Strategy" (2023) emphasize ethics and fairness but remain non-binding. Draft personal data protection laws are still under study and not yet enacted, leaving a significant legislative gap in confronting technologically amplified discrimination risks (Jordan National Information Center, 2023). This situation places a heavy burden on expansive judicial interpretation and the current application of general laws.

II. The Constitutional and Legal Framework in France

1. **Constitutional Texts:** The constitutional principle of equality in France rests on Article 1 of the 1958 Constitution ("France shall ensure the equality of all citizens before the law, without distinction of origin, race or religion") and the Preamble to the 1946 Constitution (which has constitutional value). The Preamble states that "The law guarantees women equal rights to those of men in all spheres" and affirms the impermissibility of discrimination "on grounds of political, trade union, philosophical, or religious opinion." This rich, multi-layered framework provides a solid foundation for combating various forms of discrimination, including emerging ones (Constitution of the French Republic, 1958; Preamble to the 1946 Constitution).

2. **Jurisprudence:** French constitutional and administrative courts have played a pivotal role in expanding the concept of equality and adapting it to contemporary challenges:

Constitutional Council: In numerous decisions, it has affirmed that the equality principle entails not only equality before the law but also equality in the application of the law, prohibiting unjustified

differential treatment between similar cases. It has also recognized the importance of the proportionality principle in limitations.

Council of State (Conseil d'État): It has significantly advanced the application of the equality principle to administrative decisions, including those made with the aid of automated systems. In its rulings (e.g., *Société OCTOPUS* 2020), the Council of State has begun imposing a duty of transparency on the administration when using algorithms, requiring it to ensure the absence of discriminatory biases and to provide adequate explanation for individual decisions based on them (Conseil d'État, 2020).

3. National Legislation:

General Data Protection Regulation (GDPR - French Implementation): Applies the EU GDPR in France. Its provisions are crucial weapons against data-driven discrimination:

Article 22: Regulates "automated individual decision-making," guaranteeing the individual's right not to be subject to a decision based solely on automated processing that produces legal effects or similarly significantly affects them, with conditional exceptions.

Articles 13-15: Grant individuals the right to obtain "meaningful information" about the logic involved and the significance/envisaged consequences of automated processing.

Article 35: Mandates Data Protection Impact Assessments (DPIAs), particularly for processing likely to result in high risks to rights and freedoms, such as discrimination.

The National Commission for Informatics and Liberties (CNIL) rigorously enforces these provisions, including imposing substantial fines on violators (CNIL, 2022).

Digital Republic Law (Loi pour une République numérique 2016): This law enhanced individual rights in the digital environment, including:

The right to an explanation of algorithms used in individual administrative decisions (Article 4).

The principle of "neutrality" in data processing and online service access.

Enhanced transparency regarding public algorithms. This law provides important legal tools to counter algorithmic "black boxes" (Loi n° 2016-1321, 2016).

4. Application of European Legislation: As an active EU member, France rigorously implements EU legislation:

General Data Protection Regulation (GDPR): As mentioned above, France fully implements the GDPR, utilizing Articles 13-15, 22, and 35 to combat algorithmic discrimination.

EU Artificial Intelligence Act (AI Act 2024): This legislation (expected to be fully applicable in the coming years) establishes a stringent regulatory framework based on risk assessment. Key provisions relevant to equality include:

Classification of High-Risk Systems: Including those used in employment and worker management, access to private and public services, and education (with high potential for discrimination).

Prohibited Practices: Explicitly banning AI systems for emotion recognition in workplaces and schools, social scoring, predictive policing (generally), and real-time remote biometric identification in public spaces (involving grave discriminatory risks).

Transparency Requirements for High-Risk Systems: Data quality (to avoid bias), technical documentation, transparency and user information, human oversight, accuracy, and robustness. These requirements are designed to prevent discrimination and ensure accountability (Regulation (EU) 2024/..., 2024).

Obligations on Providers and Deployers: Including conformity assessments before market entry.

Empowerment of National Supervisory Authorities: Such as the CNIL in France, to monitor compliance and impose penalties.

Summary of Comparison

Analysis of the two frameworks reveals fundamental disparities. While Jordan possesses general constitutional and legislative texts prohibiting discrimination, they remain inadequate to confront the new complexities and mechanisms of discrimination in the digital age, especially given the absence of comprehensive data or AI legislation and specialized judicial jurisprudence in this field. In contrast, France possesses a more developed and integrated constitutional and legal framework, supported by pioneering jurisprudence and advanced national and European laws (like GDPR, AI Act, Loi pour une République numérique). These explicitly regulate the use of modern technologies and focus on preventing algorithmic discrimination through mechanisms like transparency, explanation of decisions, prohibitions on dangerous practices, risk assessments, and stringent oversight. This legislative and jurisprudential disparity reflects the greater challenge Jordan faces in effectively protecting the right to equality in an era of increasing reliance on AI.

Recommendations:

For Jordan:

1. Enact specialized AI legislation focused on protecting fundamental rights, particularly equality and non-discrimination, drawing on international models while considering the local context.
2. Strengthen and modernize existing laws (Civil Service, Labour, Cybercrimes) to include explicit provisions prohibiting discrimination via automated systems and partially shifting the burden of proof in certain cases.
3. Enhance the independence and capacity of the Telecommunications Regulatory Commission (or establish an independent national authority for data and AI) and grant it sufficient monitoring, inspection, and punitive powers.
4. Build the technical and legal capacity of judges, public prosecutors, and oversight bodies to understand AI issues and algorithmic discrimination.
5. Encourage scientific research and public awareness regarding the risks of AI bias.

For France/European Union:

1. Ensure the effective and coordinated implementation of the EU AI Act 2024 across all member states.
2. Support national supervisory authorities (e.g., CNIL) with the necessary human and technical resources to keep pace with technical complexity and the scale of the task.
3. Develop practical tools and mechanisms to enhance AI explainability (Explainable AI - XAI) and facilitate proof in court proceedings.
4. Promote ongoing research on bias detection and correction in algorithms, and support the development of technical fairness standards.
5. Strengthen international cooperation and exchange of best practices, particularly with developing countries.

Joint/International Recommendations:

1. Develop more specific international guidelines on preventing discrimination in AI systems.
2. Encourage voluntary and mandatory transparency from developers and users of high-risk systems.
3. Strengthen the role of UN human rights mechanisms in monitoring and assessing the impact of AI on the right to equality.

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