Digital Identities and Social Inequality: A Sociological Analysis of Identity Formation in the Era of Algorithmic Surveillance

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Abstract

This study provides a sociological analysis of digital identity formation among Jordanian youth in the era of algorithmic surveillance. The study employed a qualitative approach using semi-structured interviews analyzed with the NVivo program. Twenty-five young men and women from three provinces (Amman, Irbid, and Karak) were selected for the study based on geographic and social diversity. The interviews were used to understand their perceptions and behaviors related to their digital presence.

The results revealed that digital identities are formed under the influence of invisible algorithms that promote certain patterns of interaction and exclude others. This perpetuates disparities related to class, gender, and geography. The study shows that, in the absence of transparency and justice in the design of these systems, young people are forced to adjust their digital identities (e.g., language and appearance) to adapt to the logic of algorithms.

The analysis was based on three main theoretical frameworks: Foucault's concept of surveillance, Bourdieu's concept of symbolic capital, and Lorton's concept of digital sociology. These frameworks revealed how digital platforms reproduce social inequality through hidden technical tools.

The study recommends integrating digital justice concepts into educational and media policies, developing legislation requiring platforms to be transparent, and promoting digital empowerment for marginalized groups.

Keywords: digital identity, Jordanian youth, algorithms, digital justice

1. Introduction

In the wake of rapid digital transformations, identity is no longer built solely through real-world social interactions. Instead, identity formations are now closely linked to digital platforms driven by invisible algorithms. These algorithms do not merely organize content, but influence how individuals appear and their symbolic and social position within the digital space, presenting us with a new pattern of class and social reproduction (Noble, 2018).

Many researchers point out that social media platforms are no longer just a means of communication, but have become a stage for the reproduction of power and cultural hegemony (Zuboff, 2019), where algorithms rearrange visibility and

invisibility based on market logic rather than social presence or intellectual content (Couldry & Mejias, 2019). With this shift, digital identity has become governed by invisible forces that reshape individuals' self-perception and symbolic representation (Bucher, 2018).

In this context, digital sociology asserts that the relationship between the individual and technology is no longer neutral or purely technical, but has become a social relationship charged with symbols, meanings, and class and cultural connotations (Lupton, 2015). Digital platforms have become a productive environment for identity, not just a vehicle for it, where affiliations, status, and self-image are reshaped through algorithmic criteria that reward certain patterns of expression and exclude others (Van Dijck, 2013).

In this context, there is a need to analyze digital identity as a cultural and social product rather than a mere extension of real-world identity (Papacharissi, 2010). Self-representation on platforms, language choice, and the type of content posted have become linked to algorithmic responsiveness, forcing users to modify their digital behavior to ensure visibility and interaction (Marwick & boyd, 2011).

These digital processes indirectly influence the reproduction of class, gender, and cultural differences, as they give preference to discourses and visual forms that are in line with prevailing market values, while marginalizing other forms of expression (Alencar, 2020). This raises questions about the fairness of these platforms in providing equal opportunities to all users, especially young people, who constitute the largest group in this space.

Young people today do not build their digital identities solely based on what they want, but also on what algorithms allow to be seen and rewarded (Bishop, 2019). They navigate between strategies of hiding and highlighting their identities in order to gain digital acceptance, which sometimes leads to a split between the "real self" and the "digital self" (Cover, 2012).

The gap widens further when we consider differences between geographical regions and social classes, with studies indicating that young people in peripheral areas or from limited social backgrounds face difficulties in accessing the same opportunities for visibility and interaction (Rawajfeh, 2022). The language used (Arabic/English) also plays a role in classifying and ranking users within digital networks (Na'man, 2021).

In the Arab context in particular, these phenomena have not been sufficiently analyzed, with most studies continuing to focus on the technical or communicative dimension without considering the symbolic and social aspects that reproduce digital inequality (Al-Qaysi et al., 2022). Hence, there is a need for an in-depth sociological study of digital identities, especially in socially and culturally heterogeneous environments such as Jordan.

This research draws on this theoretical background to analyze how digital algorithms contribute to the formation of identity among Jordanian youth and how these algorithms reproduce social and class differences through the logic of appearance and interaction. It also seeks to understand the disparities in digital visibility between males and females, and between urban and rural populations, in an attempt to offer a critical view of the reality of digital identity under algorithmic control (Couldry & Hepp, 2017).

Research problem

A fundamental issue has emerged regarding how digital identity is formed and whether digital platforms provide equal opportunities for self-expression or whether they reproduce class and cultural discrimination in a hidden way.

Main research question:

How do digital algorithms contribute to the formation of digital identities among Jordanian youth, and how are they related to the reproduction of social inequality?

Research questions

1- When do Jordanian youth typically start using digital platforms, and what factors influence this early adoption?

2- How do young people perceive their self-representation on digital platforms, and do they feel that they are expressing their true selves?

3- To what extent do young people change the way they present themselves on platforms in response to audience interaction or algorithms?

4- Which platforms do young people feel marginalize them, and what are the reasons behind this feeling?

5- How do young people assess the fairness of algorithms, and how aware are they of the impact of these algorithms on their digital visibility?

Study objectives

The study aims to:

1. Analyze the mechanisms that shape digital identity among Jordanian youth.

2. Explore the role of algorithms in influencing digital appearance.

3. Understand how algorithmic surveillance reinforces social differences.

4. Provide recommendations for achieving more inclusive digital justice.

Importance of the study

The importance of this study is highlighted by its focus on:

- Filling a knowledge gap in digital sociology, especially in the Arab context.

- Highlighting the challenges faced by young people in expressing themselves in the digital space.

- Raising awareness of the need to regulate platform algorithms in a transparent and ethical manner.

Procedural definitions for the study

- Digital identity: The sum of representations and interactions that an individual builds on digital platforms.

- Algorithms: Computational systems that organize what content appears to users on digital platforms.

- Social inequality: Differences in status, opportunities, and visibility among individuals as a result of their class, geographical, or cultural backgrounds.

- Algorithmic surveillance: Digitally tracking and analyzing individuals' behavior for the purpose of guidance, commercial exploitation, or symbolic reclassification.

Study parameters:

The study was defined by the following parameters:

- The study was conducted in the first semester of the 2024/2025 academic year.

- The study focused on young Jordanians who use digital platforms on a daily basis.

- Interviews were limited to three governorates: Amman, Irbid, and Karak.

Theoretical framework and previous studies

This research is based on three complementary theoretical frameworks that enable an understanding of the complex interactions between digital identity, algorithmic surveillance, and the reproduction of social inequalities. The importance of these frameworks lies in their ability to analyze how digital identities are formed within an algorithmically organized technological space, subject to invisible but effective power relations and social norms that reproduce social and symbolic differences, especially among young people (Couldry & Mejias, 2019).

First: Foucault's theory of surveillance

Michel Foucault is one of the most prominent thinkers to have addressed the concept of surveillance within modern systems of power. In his book Discipline and Punish (1977), Foucault presented a conception of power that is not based on direct coercion, but rather on the production of a submissive self through continuous and invisible systems of surveillance (Foucault, 1977). According to this conception, power does not operate through repression, but through self-regulation and self-control, whereby the individual becomes a watcher without a direct overseer, exercising control over themselves. Foucault used the model of the "panopticon" to explain how the structure of surveillance leads to the constant reshaping of individual behavior.

In light of this concept, contemporary digital algorithms can be understood as a new form of Foucauldian surveillance; they do not impose explicit control, but rather regulate content, direct interaction, and push users to modify their behavior in order to gain visibility or acceptance (Lyon, 2003)[3]. In the context of this study, this is reflected in how Jordanian youth adapt to the requirements of digital platforms in terms of language, appearance, and lifestyle, which shows a clear correspondence with Foucault's concept of self-surveillance resulting from an invisible structure.

Second: Symbolic capital according to Bourdieu

In his works, particularly in his essay "The Forms of Capital" (1986), a central concept: symbolic capital, which refers to the immaterial value that certain cultural or social forms acquire in the eyes of society, such as language, style, appearance, or class affiliation (Bourdieu, 1986)[4]. This capital is used to reproduce social hierarchies without appearing as a repressive force.

In the digital context, the way one presents oneself, the language used, the type of content, and even one's preferred platforms become forms of symbolic capital that determine an individual's "value" in cyberspace (Hearn, 2010). A young person who uses English and adopts a modern and visible lifestyle (such as travel or stereotypical beauty) has digital capital that allows them to increase their interaction, unlike someone who expresses themselves in a local style or in fluent Arabic.

This is where gender, spatial, and social differences come into play, as those who do not possess culturally or aesthetically appropriate symbolic capital are subject to invisibility algorithmique, or unspoken algorithmic marginalization (Noble, 2018).

Third: Digital sociology according to Lopton

Deborah Lofton is one of the leading theorists in the field of digital sociology, a modern branch that links digital technologies with the social and cultural processes that take place in virtual space. In her book Digital Sociology (2015), Lupton argues that digital identity is not simply an electronic copy of the real self, but rather the product of complex relationships between the individual, technology, and technical and organizational institutions (Lupton, 2015).

According to Lupton, the use of digital technology is not "neutral" but produces new forms of interaction, belonging, and discrimination. These processes reflect implicit power relations that arise from the logic of algorithms and influence the construction of the individual's digital self, as evidenced by the case of Jordanian youth who are forced to adapt their digital behavior to gain acceptance and interaction.

This analysis is directly relevant to the study, as interviews with Jordanian youth show that the identity they express digitally is not entirely optional, but is shaped by their interaction with the logic of the platform, the algorithm, and the digital cultural market. Language, gender, geographical location, and the nature of content also become determinants of self-construction in the digital space.

These three theories complement each other in providing a multi-angled sociological framework for analyzing digital identity in the age of algorithmic surveillance. Through Foucault, we read control and self-regulation; through Bourdieu, we understand symbolic differences and digital class inequality; and through Lubbton, we comprehend the technological and social dimensions of identity construction. This theoretical integration forms the basis of the study in understanding how the digital identities of Jordanian youth are being reshaped in a digital environment governed by algorithms, producing social inequality in a new form.

Previous studies

The researcher selected studies related to the title of his study, including:

Noble (2018), entitled "Algorithms of Oppression," aimed to analyze how search engines, particularly Google, contribute to the reproduction of racist stereotypes, especially towards black women. The results of his study showed that digital algorithms do not operate neutrally, but rather reinforce cultural and social biases rooted in the market and technical structure of content.

Zuboff (2019) conducted an in-depth analysis in her book *The Age of Surveillance Capitalism*, focusing on the role of large digital companies in exploiting personal data to shape user behavior. He revealed that digital surveillance has become an economic imperative, used to steer individuals toward specific choices without their awareness, thereby reproducing modern forms of control in the digital space.

Noman (2021) focused on studying *digital identity construction among Palestinian youth* through interviews with a sample of young people in the West Bank. The study sought to understand how young people are forced to modify their digital identity to avoid political censorship or attract interaction. The results showed that there is a growing gap between real identity and digital identity imposed by social and political pressure.

In his study, Al-Ruwajfa (2022) examined *visual content and class discrimination on Instagram*, looking at the relationship between users' socioeconomic status and their opportunities for interaction and visibility on visual platforms. The study was conducted on a university sample in Jordan and revealed that high-income groups enjoy higher digital visibility, indicating the existence of digital class discrimination that reflects real social inequalities.

Alencar (2020) conducted a field study in Belgium and the Netherlands entitled *The Digital Visibility of Marginalized Youth in Europe*. The study aimed to understand the strategies of young people from cultural minorities in building their digital presence despite algorithmic marginalization. The results showed that young people follow communication patterns influenced by the dominant digital market to avoid exclusion, reflecting a hidden pressure to reproduce central norms.

Lupton (2015), in her book Digital Sociology, developed a theoretical framework for understanding the relationship between digital technologies and social identity, arguing that digital space is not merely a technological extension, but a

social environment that organizes and reshapes the self through interaction with algorithms, technical policies, and dominant cultural norms.

Comments on previous studies

A review of these studies shows that there is general agreement that algorithms are not neutral, but rather contribute to shaping digital identities according to criteria that favor certain cultural and consumer patterns. Studies have also shown how the digital space reproduces inequality through invisible mechanisms that control opportunities for visibility, interaction, and recognition.

What distinguishes this study

1. **A specific and broad Arab context:**

Unlike previous studies that focused on individual or non-Arab cases, this study focused on Jordanian youth in multiple geographical contexts (Amman, Irbid, Karak) that take into account both class and cultural dimensions.

2. **A qualitative applied analytical approach:**

The study used semi-structured interviews and thematic analysis using NVivo, which allowed for the extraction of precise codes and differences between genders and geographical locations.

3. **Integration of three explanatory theories:**

Unlike most studies that adopted a single theoretical framework, this study combined Foucault (surveillance), Bourdieu (symbolic capital), and Lupton (digital sociology), providing a deeper understanding of digital identity as a social-technical-symbolic product.

2. Study Methodology

This study adopted a qualitative approach as the most appropriate methodological framework for understanding complex social phenomena, especially those related to identity formation, self-perception, and the symbolic meanings that individuals attach to their experiences in the digital context. More specifically, thematic analysis was adopted, which is a qualitative research design used to discover recurring patterns in textual or narrative data. This approach was chosen based on the nature of the study topic and its objectives, as it allows for an understanding of how digital identity is formed among Jordanian youth under the influence of digital algorithms and invisible surveillance mechanisms.

Justification for choosing the thematic analysis approach:

1. **Focus on participants' experiences:**

This approach provides a framework for analyzing young people's personal narratives and experiences in relation to digital platforms.

2. **Ability to extract patterns and deeper meanings:**

Thematic analysis helps identify central themes that recur in responses and break them down into codes that represent social and cultural meanings.

3. **Close connection to the interview tool:**

This approach supports the use of semi-structured interviews and helps link them to the study questions and analyze them in depth.

4. **Possibility of using supporting software:**

The analysis was carried out using NVivo 12 Plus, which enhanced the accuracy of the classification, the ability to compare categories, and the identification of causal relationships.

Accordingly, this approach enabled the researcher to provide a rich interpretive reading of digital identities as expressed by participants, in a context where technology intersects with the social and symbolic structures of discrimination and justice.

Study population and sample

The study population consisted of young Jordanians from three governorates (Amman, Irbid, and Karak) who use digital platforms on a daily basis. A total of 25 participants (13 females and 12 males) were selected, taking into account social diversity.

Study tool

This study relied on **semi-structured interviews** as the main data collection tool, in line with the nature of the qualitative approach, which focuses on understanding social phenomena in their natural context by tracking participants' personal experiences and self-narratives.

The interview questions were derived directly from the study questions to ensure methodological integrity between the design of the tool, the research objectives, and the theoretical framework used, thereby enhancing the validity of the results and their subsequent analysis.

Construction of the interview tool:

The questions were carefully designed to be open-ended and flexible, allowing participants to freely express their experiences and attitudes. The tool underwent academic review by three experts in digital sociology and qualitative methodology to ensure that the questions were clear and appropriate for the target group.

Interview questions:

1. When did you start using digital platforms?

2. Do you feel that you represent your true self on these platforms?

3. Have you ever changed the way you present yourself due to a lack of engagement?

4. Which platforms do you feel marginalize you? Why?

5. Do you think algorithms are fair? Why?

6. In your opinion, does the way digital platforms are used differ between males and females? Or between people in your province and people in other provinces? Why do you think so?

This sixth question was added to broaden the contextual and interpretive understanding of young people's experiences within the frameworks of gender and geographical location.

Tool characteristics:

- Questions were formulated in understandable and realistic language appropriate to the cultural and social environment of young people.

- Icebreaker techniques were used to build rapport (e.g., open dialogue about everyday use) before asking analytical questions.

- The tool was field-tested through a pilot interview with a participant from outside the core sample, which helped to modify some of the wording without altering the essence of the questions.

Reasons for choosing the interview tool:

- Semi-structured interviews are appropriate for qualitative research, as they allow for in-depth exploration of the respondents' personal experiences.

- They allow for freedom of expansion and narration, which is in line with the researcher's desire to explore the deeper meanings associated with digital identity.

Validity and reliability of the tool

Ensuring validity and reliability in qualitative research is essential to guarantee the reliability of the results and their scientific interpretation.

Given that the study uses semi-structured interviews as its primary tool, a set of measures has been taken to enhance the validity and reliability of the tool, in line with accepted standards in qualitative research.

First: Credibility

Credibility in qualitative research refers to the extent to which the results correspond to the reality expressed by the participants. In this study, credibility was achieved through the following:

1. **Scientific review:**

The interview tool was presented to three reviewers from the fields of sociology and digital media to assess the suitability of the questions for the research objectives and their clarity and accuracy in terms of language and content.

2. Pilot interview:

A pilot interview was conducted with four young Jordanians from outside the study sample, which helped to:

- Testing the participants' understanding of the questions.

- Measure the flow and duration of the interview.

- Modify some of the wording to make it more conducive to narrative and elaboration without changing the meaning.

3. **Based on the theoretical framework:**

The questions were constructed based on the theoretical framework of the study (Foucault, 1977; Bourdieu, 1986; Lubton, 2015), which enhanced the construct validity.

4. **Integrating study questions with instrument questions:**

The alignment of the study questions with the interview questions helped to strengthen the **internal consistency** between the research instrument and the theoretical framework, which supports interpretive validity.

Dependability

In qualitative research, dependability refers to the stability of the procedural method and data analysis despite varying conditions or repeated experiments. Dependability was ensured through:

1. Accurate recording and transcription of interviews:

All interviews were recorded (after obtaining consent) and then transcribed using voice recognition tools, followed by manual review to correct errors and ensure correct meaning.

2. Keeping analytical records:

All steps of the analysis were documented in NVivo 12 Plus, with primary and secondary codes recorded, allowing for data review and verification of internal consistency in coding and analysis.

3. Repeated review of codes and themes:

Codes and themes were reviewed twice by the same researcher to ensure consistency in classification and meaning.

4. **Comparison matrices:**

Matrices were used within NVivo to link patterns with participant characteristics (gender, location, educational level), which helped to identify gaps or biases, if any, and reduce personal influence in the analysis.

Conducting interviews

All interviews in this study were conducted using digital communication methods, through internet applications designed for video communication, in line with the nature of the qualitative approach adopted.

Type of interviews:

The study relied on semi-structured interviews, which allow participants freedom of expression, with key topics guiding the discussion and keeping it consistent with the research objectives.

Method of implementation:

All interviews were conducted online using the following applications:

- Zoom
- Microsoft Teams
- Google Meet

The application was chosen based on each participant's preference and ease of access.

Reasons for choosing digital means:

1. Geographical spread of the sample, which was distributed across three governorates (Amman, Irbid, and Karak), making digital interviews more practical in terms of time and logistics.

2. Flexibility of time and access, as participants were able to join the interviews from their own locations and at times convenient for them.

3. Consistency of the methodology with the study topic, as the study deals with digital identity and practices on platforms, so the use of digital tools in data collection is part of the research environment itself.

4. Ease of documentation and recording: All interviews were recorded (after obtaining participants' consent) and subsequently transcribed accurately for use in thematic analysis within the NVivo software.

Duration of the interview:

Each interview lasted between 25 and 35 minutes, depending on the participant's interaction, the richness of their answers, and the branches of the dialogue with the main interviewer. A total of 25 individual interviews were conducted in this study, with an average duration of 30 minutes per interview. The interviews were spread over five consecutive days, with four to five interviews per day, according to a flexible schedule that took into account the availability of participants and

their psychological comfort during the interaction. The total time of the recorded interviews was approximately 12.5 hours, which was transcribed and analyzed according to the steps of thematic analysis.

Ethical considerations:

- **Verbal and written consent** were obtained from participants prior to the interview.

- Each participant was informed that the information would be used for research purposes only, with **complete confidentiality** and anonymity guaranteed.

3. Data Analysis

NVivo 12 Plus software was used, and the data was analyzed according to the following steps:

1. Transcription of interviews.

2. Creation of preliminary codes such as "self-representation," "adaptation to the algorithm," and "aesthetic discrimination."

3. Grouping of codes into three main themes:

- Adaptation to the algorithm: changing language and appearance to get interaction.

- Social differences: rural/urban, type of content.

- Awareness of surveillance: young people's perception of the unfair nature of algorithms.

4. Produce interpretive models and link patterns to gender and location.

Analysis of study results

The data were analyzed using thematic analysis within NVivo 12 Plus, where participants' responses were coded and common narrative patterns were extracted. The following is a detailed presentation of each question and its analysis:

Results related to the answer to the first question: When did you start using digital platforms?

The results of the analysis showed that the vast majority of participants, specifically 21 out of 25, indicated that they started using digital platforms at an early age, ranging from 13 to 16 years old. There was a clear time lag between urban and rural populations, with residents of the capital Amman entering the digital space at a younger age than residents of the Karak governorate. This disparity can be attributed to several factors, most notably the availability of digital infrastructure, internet speed, and digital awareness in urban environments compared to their limitations in rural environments. This analysis yielded a set of qualitative codes, namely: early access, age-based digital divide, and digital infrastructure.

Results related to the second question: Do you feel that you represent your true self on these platforms?

The analysis showed that about 68% of participants do not feel that they represent their true selves when using digital platforms. Many of them expressed a gap between what they present digitally and their real personalities, with some indicating that they adopt an image that the public likes or that is in line with algorithmic requirements. Among the expressions that emerged were: "Like the version that people like" and "I have to be my hair, not my personality." This analysis resulted in key codes such as: self-representation gap, apparent self vs. real self, conformity to norms, and digital social pressure.

Results related to the third question: Have you ever changed the way you present yourself due to a decrease in engagement?

Seventeen participants reported that they had modified their appearance on digital platforms as a direct response to decreased interaction. These modifications included switching from Arabic to English, improving the quality of photos, and keeping up with trending content. These changes were linked to codes such as: adapting to the algorithm, language as a capitalist tool, and a pragmatic shift in self-presentation. Clear gender differences also emerged, with females tending to modify their appearance, while males focused on language and professional content.

Results related to the fourth question: Which platforms do you feel marginalize you? Why?

Participants highlighted a sense of digital marginalization on platforms such as TikTok and Instagram, due to the promotion of an aesthetic and consumerist lifestyle that does not correspond to their social or economic reality. Participants from middle- or low-income backgrounds expressed feelings of exclusion, emphasizing that their content did not receive the visibility or engagement they expected. Coding emerged, such as aesthetic exclusion, class marginalization, and visual inequality. Participants from governorates such as Karak and Irbid also expressed feelings of digital alienation due to their underrepresentation in the digital space.

Results related to the fifth question: Do you think algorithms are fair? Why?

Twenty out of 25 participants expressed their belief that algorithms are unfair, describing them as favoring paid content or content that aligns with the logic of the digital market. Some pointed out that algorithms are "market-like," rewarding those who have the means to attract attention and promote themselves. The analysis revealed key themes such as algorithmic opacity, indirect discrimination, and digital capitalism. A number of participants also expressed a sense of loss of control over how they are represented digitally.

Results related to the sixth question: "In your opinion, does the way digital platforms are used differ between males and females? Or between residents of your province and residents of other provinces? Why do you think so?"

This question was analyzed using **Thematic Analysis** through NVivo software, where responses were categorized by gender and geographical location, providing accurate qualitative results as follows:

Differences between males and females

Female perceptions:

The responses of female participants showed a deep awareness of the pressures related to appearance and gender stereotypes imposed through digital platforms. Recurring expressions included:

- "Likes come more for appearance than content."
- "I feel like I have to be pretty to interact."
- "The algorithm likes girls with a certain 'style.'"

Recurring themes in female responses:

- Gender representation
- Digital aesthetic pressure
- Feminine stereotypes

Male perceptions:

Male responses focused on the importance of using English and focusing on professional or sports content to achieve higher engagement. Some of the most notable responses were:

- "If I speak Arabic, my content doesn't reach anyone."
- "I have to be trendy, not intellectual."

Recurring codes in male responses:

- Language as a symbol of capitalism
- Strategic appearance
- Professionalism versus self-identity

Differences between governorates

Participants from Amman Governorate:

Participants from Amman expressed their awareness of algorithmic mechanisms and their ability to control their digital presence. They described themselves as "digitally empowered" and noted that the digital environment in the capital helps them follow trends and compete for engagement.

Participants from Karak and Irbid:

In contrast, participants from Karak and Irbid expressed feelings of digital exclusion and difficulty in accessing or spreading content, despite the quality of their content in some cases. Repeated statements included:

- "The platform doesn't support people like us."
- "Even if I say important things, no one will see me."
- "We don't have the space to succeed like people in Amman."

Recurring themes in peripheral governorates:

- Geographical exclusion
- Digital class marginalization
- Centralized control of content

Table (1). Comparison matrix between variables

Category	Usage Patterns	Key Codes
Males	Language switching, focusing on performance.	Language as capital – Engagement – Digital capitalism
Females	Appearance adjustment, feeling pressure	Gendered representation – Beauty – Normativity
Amman	Algorithm adaptation, algorithmic awareness	Visibility management – Professionalism – Self-control
Karak/Irbid	Feeling marginalized, limited reach	Digital isolation – Inequality – Alienation

This reinforces one of the study's conclusions: that digital identity is not neutral or entirely free, but rather an expression of a complex relationship between the self, the digital market, and social structures.

4. Discussion

Question 1: When did you start using digital platforms?

The interview results showed that the vast majority of participants started using digital platforms at an early age (13–16 years), revealing their early integration into the digital space and the formation of their self-awareness through it. This suggests that social media platforms have become part of young people's socialization, especially in large cities such as Amman, while rural populations have been relatively slower to adopt them. This finding is consistent with a study by Noman (2021), which showed that geographical and cultural contexts influence the timing and manner of digital identity formation, and intersects with Lofton's (2015) view that technology has become part of everyday social experience.

Second question: Do you feel that you represent your true self on these platforms?

Most participants expressed that they did not feel that they represented their true selves on digital platforms, as they felt the need to modify their images or content to align with what the algorithms preferred. This feeling is consistent with what Cover (2012) reported about the tension between the "digital self" and the "real self," where individuals are imposed with a stereotypical image of what they should be digitally, which reinforces the gap between self-representation and reality.

Third question: Have you ever changed the way you present yourself because of a decline in interaction?

Seventeen out of 25 participants confirmed that they had changed their digital representation methods, such as using English instead of Arabic or adopting a specific visual style, in order to increase interaction. This suggests that young Jordanians are engaging in a form of forced adaptation to algorithms, similar to what Marwick & boyd (2011) described as an "imagined audience" that guides content. This is also consistent with Noble's (2018) analysis, which pointed out that algorithms reinforce certain patterns of representation and marginalize others.

Question 4: Which platforms do you feel marginalize you? Why?

A number of participants mentioned feeling marginalized on platforms such as Instagram and TikTok, where they felt that these platforms promote a stereotypical aesthetic and consumerist image that does not reflect their reality. Concepts such as "aesthetic exclusion" and "digital classism" were frequently mentioned. This finding is consistent with a study by Al-Ragoufa (2022), which found that luxurious visual content receives higher engagement, confirming the existence of algorithmic bias based on class and cultural criteria.

Question 5: Do you think algorithms are fair? Why?

Most participants expressed distrust in the fairness of algorithms, viewing them as a tool that favors those who have the ability to pay or adapt to the logic of the digital market. They were described as opaque, non-transparent, and reinforcing indirect discrimination. This assessment is fully in line with Zuboff's (2019) thesis on "surveillance capitalism," which argues that data is used to shape behavior, not to serve the user, thereby reinforcing economic domination at the expense of digital justice.

Question 6: Does the use of platforms differ by gender and geographical location?

The interviews revealed clear differences in usage patterns between males and females, as well as between urban and rural residents. Females reported experiencing pressure related to appearance, while males focused on professional performance and content. Rural residents felt that their voice was less present digitally than that of capital city residents, indicating the existence of a "symbolic digital divide." These findings intersect with Bourdieu's (1986) analysis of the concept of symbolic capital, whereby patterns that carry desirable digital symbols are rewarded, while other patterns are excluded.

Methodological limitations of the study

Despite efforts to provide an in-depth analysis of digital identity formation in the context of algorithmic surveillance, the study faces some methodological limitations that must be taken into account:

- The sample was limited to a small segment of Jordanian youth, which may limit the generalizability of the results to other social groups.

- The study relied on qualitative data based on interviews and self-reported experiences, which may be influenced by the personal biases of the participants.

- There is a lack of quantitative data to complement the qualitative findings, which is an area for future research.

5. Recommendations

In light of the study's findings, the researcher recommends the following:

1- Enhancing digital awareness among young people: The study recommends integrating the concepts of "digital identity" and "algorithmic surveillance" into university and school curricula to enhance young people's awareness of how algorithms and technologies shape their behavior and self-image in the digital space.

2- Enact regulatory policies for digital justice: There is a need to develop legislative frameworks that protect individuals, especially marginalized groups, from algorithmic bias and class discrimination based on appearance or online activity, while ensuring transparency in the work of digital platforms.

3- Empowering young people with tools to resist algorithms: Providing open training platforms that enable young people to learn "digital stealth" skills, personal data management, and "digital camouflage" strategies to counter surveillance and control.

4- Launch community awareness campaigns on the digital divide: Encourage media institutions and community organizations to organize educational campaigns on the impact of the digital divide and e-class on social justice, to dismantle stereotypes resulting from "selective digital culture."

5- Support local digital sociological research: Encourage universities and research centers to fund ongoing studies addressing the relationship between technology, identity, and class in the Jordanian and Arab contexts, in order to build a knowledge base capable of guiding digital policies.

Authors' contributions

Mohammad Salman Alkhazaleh was responsible for Conceptualization; Methodology, Investigation, and Writing; Mimas Kamour was responsible for data collection, writing, and revising; Ahmed Mostafa and Samer Abdel-Hadi were responsible for Writing — Review & Editing. Shereen Mohamed Ali and Reema Al Qaruty were responsible for writing and revising the final manuscript. All authors read and approved the final manuscript.

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The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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No additional data are available.

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