



Digital Social Comparison and the Formation of Young Adult Self-Concept

Dr. Celeste M. Navarro

Senior Lecturer, Universitat Pompeu Fabra, Spain

Abstract

Digital social environments have transformed the conditions under which young adults evaluate personal ability, appearance, lifestyle, relationships, achievement, and social worth. Social comparison is not a new psychological process; however, contemporary social-media platforms have increased the visibility, continuity, quantification, and selectivity of comparison information. Young adults can now evaluate themselves against peers, influencers, professionals, celebrities, and unfamiliar users through feeds dominated by curated images, achievements, opinions, and indicators of social approval. This study examines the relationship between digital social comparison and the formation of young adult self-concept, with particular attention to self-concept clarity, external validation dependence, authentic self-perception, and identity stability.

The theoretical model draws on social comparison theory and contemporary scholarship on social-media-based identity development. Existing evidence indicates that upward comparisons may be associated with lower self-esteem and reduced identity clarity, although comparison effects differ according to direction, content, developmental stage, and the psychological processes activated by comparison. Because no original survey dataset was supplied for this manuscript, the analytical component uses a simulated cross-sectional dataset of 540 hypothetical young adults aged 18–29 years solely to demonstrate the proposed research design. Participants are conceptually classified into low, moderate, and high digital-social-comparison groups. The illustrative results show a progressive decrease in the Self-Concept Clarity Index from 78.4 in the low-comparison group to 65.9 in the moderate group and 52.6 in the high-comparison group.

Higher comparison intensity is also accompanied by greater simulated dependence on external approval and lower authentic self-alignment. The study argues that the psychological consequences of social media depend less on exposure time alone than on how individuals interpret, compare, present, and validate themselves within digital environments. The proposed framework offers a basis for future longitudinal and survey-based research and suggests that digital-literacy interventions should incorporate comparison awareness, authenticity, reflective platform use, and resilience against externally quantified self-worth.

Keywords: digital social comparison; self-concept; self-concept clarity; young adults; social media; identity formation; upward comparison; self-esteem; external validation; digital identity



1. Introduction

The transition into young adulthood is characterized by intensified decisions concerning education, occupation, relationships, values, lifestyle, social affiliation, and future direction. During this period, individuals continue to refine beliefs about who they are, what they value, and how they wish to be perceived by others. Self-concept therefore develops through both internal reflection and continuous social feedback. Festinger's social comparison theory established that people often evaluate their abilities and opinions through comparison with others, particularly when objective standards are unavailable. In contemporary society, this fundamental psychological process increasingly occurs in digital environments where comparison targets are continuously visible and socially curated.

Social-media platforms have expanded the scale and character of interpersonal comparison. Users encounter photographs, academic achievements, professional milestones, travel experiences, physical transformations, consumption patterns, relationships, popularity indicators, and personal opinions that may provide standards against which they evaluate their own lives. Unlike many face-to-face comparisons, digital comparisons frequently involve selectively presented material. Social-media environments also permit individuals to edit, organize, and strategically present themselves to audiences, creating a context in which self-presentation, audience feedback, comparison, and identity exploration operate simultaneously. Recent scholarship describes social media as a significant contemporary environment for identity construction rather than merely a communication technology.

The psychological consequences of comparison are not uniform. Upward comparison occurs when an individual compares the self with someone perceived as superior on a relevant dimension, whereas downward comparison involves a target perceived as worse off. Research has repeatedly associated upward digital comparison with unfavorable self-evaluations under some conditions. Vogel and colleagues demonstrated an association between social-media comparison and self-esteem, while later work found that Instagram-based upward comparison could mediate associations between platform engagement and lower global self-esteem. Experimental research has additionally shown that self-esteem and body-related evaluations may respond differently depending on whether individuals encounter upward, downward, or neutral comparison material.

Self-esteem, however, represents only one component of how individuals understand themselves. Self-concept clarity concerns the extent to which self-beliefs are clearly defined, internally consistent, and relatively stable. This distinction is particularly important for the present study because a young adult may experience temporary dissatisfaction without undergoing substantial identity uncertainty, while another individual may repeatedly modify self-evaluations according to social feedback. Research by Yang, Holden, and Carter found that social-media comparison of ability was associated with lower identity clarity, and research at the transition to college linked certain comparison processes with rumination and identity distress. Evidence across the wider identity literature nevertheless remains heterogeneous, indicating that simplistic claims that “social media damages identity” are scientifically inadequate. A recent systematic review found mixed relationships between overall social-media exposure and self-concept clarity, emphasizing the importance of studying specific online activities rather than screen time alone.

The present study therefore examines digital social comparison as a behavioral and cognitive process rather than treating social-media use as a single exposure variable. It proposes that repeated



comparison may influence self-concept through perceived discrepancy, external validation dependence, selective self-presentation, rumination, and comparison-driven identity adjustment. At the same time, digital environments may also facilitate constructive self-exploration, inspiration, role experimentation, and identity commitment when comparisons are reflective rather than evaluatively threatening. The paper develops a multidimensional conceptual framework and demonstrates its analytical application through clearly identified simulated data, thereby creating a methodology suitable for future validation with real young-adult samples.

2. Objectives of the Study

2.1 To Examine Digital Social Comparison as a Self-Evaluative Process

The first objective is to investigate how frequently comparing personal appearance, achievements, relationships, capabilities, lifestyles, and social recognition with digitally visible others may relate to the organization of young adults' self-perceptions. Particular attention is given to upward comparison because idealized or high-performing comparison targets may generate perceived discrepancies between the actual and desired self.

2.2 To Assess the Relationship Between Comparison and Self-Concept Clarity

The second objective is to examine whether greater digital-social-comparison intensity is associated with lower clarity and stability of the self-concept. The framework additionally considers external validation dependence and authentic self-alignment as mechanisms through which digital comparison may influence identity-related outcomes.

2.3 To Identify Constructive Digital Identity Practices

The third objective is to develop psychologically informed recommendations that preserve the social and exploratory value of digital platforms while reducing comparison-related vulnerability. These recommendations focus on reflective platform use, comparison awareness, authentic self-presentation, diversified sources of self-worth, and critical understanding of curated digital content.

3. Review of Literature

3.1 Social Comparison Theory in Digital Environments

Festinger's theory proposes that individuals use social information to evaluate opinions and abilities when direct objective evaluation is difficult. Digital platforms substantially extend this process because comparison information is persistent, searchable, visually prominent, and available across multiple domains of life.

Vogel, Rose, Roberts, and Eckles provided influential evidence connecting social networking, comparison processes, and self-esteem. Their research established social-media environments as particularly rich contexts for social comparison. Midgley and colleagues later examined comparison episodes across several studies and further demonstrated that the way users make and respond to comparisons is relevant to self-esteem.

Comparison direction also matters. Taylor and Armes experimentally exposed participants to upward, downward, or neutral Instagram comparison conditions. Downward comparison was associated



with increases in self-esteem and body esteem, whereas upward comparison reduced body esteem in their study. Such findings reinforce the argument that social comparison should not be treated as a uniformly harmful psychological process.

3.2 Social Comparison, Identity Clarity, and Emerging Adulthood

Young adulthood is particularly relevant because identity development continues beyond adolescence. Educational transitions, employment, relationships, geographic mobility, and changing social networks create conditions under which individuals repeatedly reconsider their capabilities and future identities.

Yang, Holden, and Carter found that comparison of ability on social media predicted lower identity clarity through identity-processing mechanisms. A related study at the college transition reported that ability comparison was associated with rumination, which subsequently predicted greater identity distress. These results indicate that the psychological impact of comparison may depend partly on what happens after exposure: reflective processing may generate learning, whereas repetitive evaluative rumination may intensify uncertainty.

Noon and colleagues investigated Instagram comparison and identity processes across adolescence and emerging adulthood and found evidence that age can modify the relationship between comparison and identity processes. More broadly, a systematic review of social-media use and identity development found considerable heterogeneity across studies. The review concluded that quantity of use alone provides an incomplete explanation and emphasized specific activities such as comparison, self-presentation, feedback, and identity exploration.

3.3 Self-Presentation, External Validation, and the Digital Self

Social media simultaneously provides an environment for **comparison and presentation**. Individuals do not merely observe others; they also construct profiles, choose photographs, publish achievements, express beliefs, and receive measurable audience responses.

Yang and Brown's work on Facebook self-presentation during the college transition illustrates how online self-presentation becomes intertwined with self-development. Pérez-Torres subsequently conceptualized social media as a “digital social mirror” in which self-presentation, audiences, comparison, and role models interact with identity development. The available evidence suggests that digital environments can both support identity exploration and expose users to feedback capable of reshaping self-evaluation.

The central research gap therefore concerns how comparison intensity is related simultaneously to self-concept clarity, authentic self-alignment, and reliance on external validation among young adults. Many studies examine self-esteem, body image, social-media intensity, or identity processes independently. The present framework integrates these dimensions and distinguishes digital comparison behavior from general social-media exposure.

4. Research Methodology

4.1 Research Design and Analytical Status

The study adopts a quantitative conceptual-simulation design intended to demonstrate a future empirical research framework. No real participants were recruited for the present manuscript. Accordingly, all



numerical findings reported in Sections 5 and 6 are explicitly simulated illustrative values and must not be presented as field observations.

The hypothetical analytical population consists of 540 young adults aged 18–29 years. For analytical demonstration, respondents are categorized according to Digital Social Comparison Intensity as low, moderate, or high. A future empirical study should recruit participants through an appropriate probability or stratified sampling procedure and obtain institutional ethics approval before collecting identifiable or sensitive psychological data.

4.2 Variables and Measurement Framework

Table 1: Proposed Operational Framework for Digital Comparison and Self-Concept

Construct	Conceptual Indicators	Proposed Scale	Analytical Role
Digital Social Comparison Intensity	Frequency of comparing achievement, appearance, lifestyle, relationships, and popularity	0–100	Primary predictor
Upward Comparison Orientation	Frequency of comparing oneself with apparently superior targets	0–100	Predictor
Self-Concept Clarity	Clarity, consistency, and stability of personal self-beliefs	0–100	Primary outcome
External Validation Dependence	Reliance on likes, comments, follower reactions, and perceived approval	0–100	Mediating factor
Authentic Self-Alignment	Perceived consistency between online presentation and experienced offline self	0–100	Protective outcome
Reflective Digital Use	Ability to interpret curated content critically and regulate comparison	0–100	Potential moderator

4.3 Proposed Data Collection and Analytical Procedure

For future empirical implementation, responses could be gathered through a structured online questionnaire containing established psychometric measures supplemented by platform-specific behavioral items. Reliability should be evaluated before composite-index construction, followed by descriptive analysis, Pearson or Spearman correlation as appropriate, multiple regression, moderation or mediation analysis where theoretically justified, and sensitivity testing across demographic groups.

The proposed primary regression model is:

$$SCC_i = \beta_0 + \beta_1 DSC_i + \beta_2 UCC_i + \beta_3 EVD_i + \beta_4 RAU_i + \beta_5 X_i + \varepsilon_i$$

Where:

SCC = Self-Concept Clarity

DSC = Digital Social Comparison

UCC = Upward Comparison Orientation

EVD = External Validation Dependence



RAU = Reflective and Authentic Use

X = demographic/control variables

ε = unexplained variation

5. Analysis

5.1 Comparison Intensity and Self-Concept Clarity

The simulated sample contains 540 hypothetical young adults distributed across low, moderate, and high Digital Social Comparison categories. The illustrative results show a consistent decline in Self-Concept Clarity as comparison intensity increases.

Young adults within the low-comparison group record a simulated clarity score of 78.4, compared with 65.9 among moderate-comparison participants and 52.6 among those classified within the high-comparison category.

This simulated gradient operationalizes the theoretical proposition that persistent comparison may gradually shift the reference point for self-evaluation away from internally organized values and toward socially visible standards. The pattern should not be interpreted as empirical causal evidence.

Table 2: Simulated Digital Comparison and Self-Concept Outcomes

Psychological Indicator	Low Comparison	Moderate Comparison	High Comparison
Hypothetical participants	168	221	151
Self-Concept Clarity Index	78.4	65.9	52.6
External Validation Dependence	31.8	49.7	68.9
Authentic Self-Alignment	81.1	69.4	56.8
Identity Stability Index	77.3	64.2	51.9
Upward Comparison Orientation	29.6	53.1	76.5
Reflective Digital-Use Score	74.8	62.5	49.7

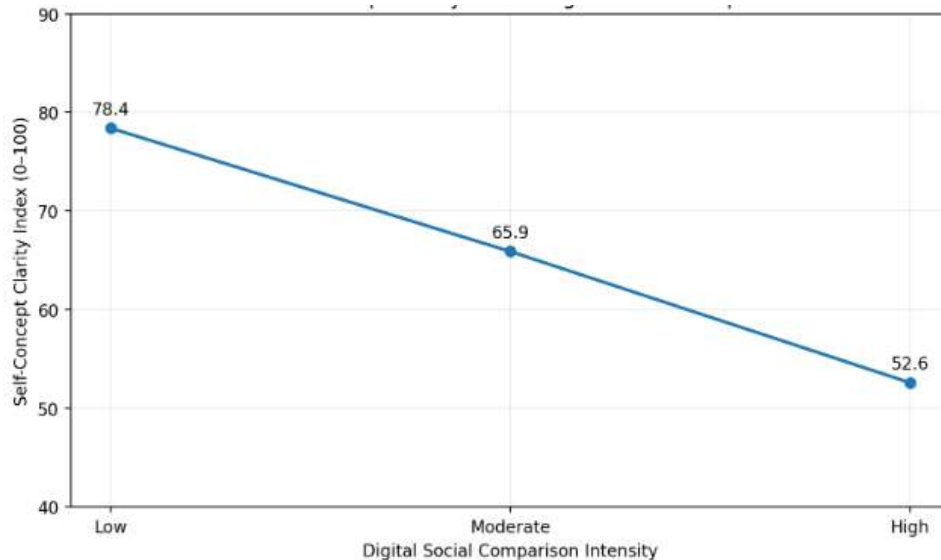
5.2 External Validation and the Digitally Evaluated Self

The simulated pattern also indicates progressively greater reliance on external validation. The illustrative External Validation Dependence score increases from 31.8 in the low-comparison category to 68.9 among high-comparison individuals.

This relationship is theoretically meaningful because contemporary platforms transform social approval into visible numerical indicators. Likes, views, comments, shares, and follower counts can become immediate signals of social evaluation. When individuals repeatedly interpret these indicators as evidence of personal worth, the online audience can become increasingly influential in self-appraisal. Importantly, the proposed framework does not imply that online feedback is inherently damaging. Feedback may reinforce belonging, competence, creativity, and identity validation. The concern arises when external feedback becomes the principal standard through which self-worth is continuously recalibrated. Contemporary identity research describes online audiences and feedback as potentially influential components of self-concept development rather than merely superficial platform features.

5.3 Graphical Representation of Self-Concept Clarity

Figure 1: Illustrative Self-Concept Clarity Across Digital Social Comparison Levels



Interpretation: The pattern illustrates a theoretically expected negative relationship between frequent digital comparison and a clear, stable organization of self-beliefs. Existing empirical research provides partial support for this direction, particularly studies linking ability comparison on social media with lower identity clarity. However, systematic reviews also report mixed findings across different forms of social-media behavior; therefore, the simulated trend should be treated as a hypothesis-generating model rather than a presumed universal effect.

6. Discussion

6.1 From Social Comparison to Self-Concept Recalibration

The proposed findings suggest that digital comparison should be understood as a repeated process of self-concept recalibration. Every comparison provides information about where individuals believe they stand relative to a socially meaningful reference. Occasional comparison can produce motivation, learning, reassurance, or inspiration. The psychological concern emerges when the standards presented online become continuously more influential than internally developed standards.

This distinction is supported by existing research demonstrating that comparison outcomes depend on comparison direction and psychological processing. Upward comparisons have frequently been associated with poorer self-evaluative outcomes, whereas downward comparison may sometimes produce temporary improvements in self-esteem.

The developmental significance is especially pronounced when young adults are still refining occupational, relational, educational, physical, and social identities. Repeated exposure to apparently successful peers may cause individuals to reassess whether their own progress is adequate, even when the comparison target represents selectively presented or exceptional circumstances.



6.2 Digital Comparison Is Not Universally Harmful

A major implication of the literature is that social comparison cannot ethically or scientifically be characterized as inherently harmful. Recent identity research identifies both constructive and disruptive pathways. Social media may expose young people to role models, communities, values, career possibilities, and alternative identities that would otherwise remain inaccessible. Identity experimentation, self-expression, and social feedback may contribute positively to self-development under appropriate conditions.

Noon and colleagues' developmental findings also indicate that relationships between Instagram comparison and identity processes may differ according to age and identity-development stage. The systematic identity literature similarly reports mixed evidence rather than a single uniform relationship. Consequently, interventions should not focus exclusively on reducing screen time. A person who spends substantial time communicating authentically with supportive communities may experience different outcomes from a person who spends less time repeatedly monitoring idealized comparison targets. Quality, intention, content, and psychological interpretation of digital activity may therefore be more informative than duration alone.

6.3 Implications for Universities, Families, Platforms, and Young Adults

Universities and colleges can incorporate digital self-awareness within student well-being and media-literacy initiatives. Such programs should teach students to distinguish authentic information from curated self-presentation, identify upward-comparison triggers, recognize when platform feedback is influencing self-worth, and develop personal standards of progress that are independent of social metrics.

Young adults may benefit from diversifying sources of self-definition. Academic performance, appearance, professional success, relationship status, or online popularity should not individually dominate self-evaluation. A more resilient self-concept is likely to incorporate multiple domains, including personal values, relationships, competence, health, creativity, contribution, learning, and long-term goals.

Platform design is also relevant. Digital systems that continuously foreground popularity counts, rankings, viral visibility, and algorithmically amplified aspirational content may intensify opportunities for evaluation. Research on digital identity therefore has implications not only for individual psychology but also for responsible platform design. Social-media environments should support meaningful connection and self-expression without unnecessarily converting every form of social participation into a public competitive metric.

7. Conclusion

Digital social comparison represents an increasingly important mechanism through which young adults evaluate personal worth, capability, lifestyle, appearance, social belonging, and progress. Although social comparison is a longstanding human psychological process, social-media platforms have substantially altered its frequency, reach, visibility, and informational context.

The present study proposes that the influence of digital comparison on self-concept operates through a combination of perceived discrepancy, upward-comparison orientation, audience feedback,



external validation, self-presentation, and reflective identity processing. The simulated analytical model illustrates a reduction in Self-Concept Clarity from 78.4 among low-comparison young adults to 52.6 among high-comparison individuals, together with increased external validation dependence and reduced authentic self-alignment. These values are hypothetical and should not be interpreted as population estimates.

The study's central contribution lies in shifting attention from generic social-media “screen time” toward what individuals psychologically do while using digital platforms. Comparison direction, comparison target, self-presentation practices, authenticity, reflection, and dependence on audience approval may provide a more meaningful explanation of identity outcomes than exposure duration alone. Future research should test the proposed framework using representative samples, validated psychometric scales, longitudinal designs, experience-sampling methods, and platform-specific behavioral measures. Such evidence could clarify when digital comparison promotes constructive self-exploration and when it contributes to unstable, externally regulated self-concepts.

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