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Level of self-esteem and mental well-being among nano-influencers

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Abstract
India's rapidly expanding digital creator economy—growing by 322% since 2020—has positioned nano-influencers (individuals with 1,000–10,000 social media followers) as a psychologically distinct and understudied population. Unlike passive social media consumers or high-profile macro-influencers, nano-influencers actively curate personal narratives for public evaluation, subjecting themselves to daily feedback loops of metrics, comments, and social comparison without the institutional support available to larger creators. This unique digital labor raises substantive questions about their psychological functioning, particularly regarding self-esteem and mental well-being—two constructs foundational to clinical psychology and health promotion.

The present study employed a quantitative cross-sectional correlational design to examine self-esteem and mental well-being levels among 80 nano-influencers aged 18–35 years (Male = 45, 56.3%; Female = 35, 43.7%), primarily active on Instagram (85%) and YouTube (15%). Two validated psychometric instruments were administered via Google Forms: the Rosenberg Self-Esteem Scale (RSES; Rosenberg, 1965) and the Warwick-Edinburgh Mental Well-Being Scale (WEMWBS; Tennant *et al*., 2007). Descriptive analysis revealed that the majority of participants reported normal self-esteem (72.5%; M = 16.74, SD = 4.62) and moderate-to-high mental well-being (96.2%; M = 36.36, SD = 7.36). Shapiro-Wilk normality tests confirmed non-normal distribution for the RSES ($W = .891$, $p < .001$), justifying the use of non-parametric Spearman's rho correlation analysis.

Results revealed a statistically significant moderate-to-strong positive correlation between self-esteem and mental well-being ($\rho = .611$, $p < .001$), supporting the primary hypothesis. No significant differences were observed across gender (Mann-Whitney U: $p = .094$) or follower count categories (Kruskal-Wallis H: $p = .062$, $p = .212$). The 1,000–5,000 follower subgroup yielded the highest descriptive ranks on both measures, lending preliminary support to optimal distinctiveness theory. These findings suggest that nano-influencers maintain resilient psychological profiles, with self-esteem emerging as a central determinant of mental well-being. Clinical implications, including self-esteem-focused cognitive-behavioral and acceptance-based interventions, are discussed, along with recommendations for platform-level mental health policies.

Keywords: nano-influencers, self-esteem, mental well-being, Rosenberg Self-Esteem Scale (RSEs), Warwick-Edinburgh Mental Well-Being Scale (WEMWBS), spearman correlation, digital creator psychology, social media, India no paraphras

Introduction

1. Background of the Study

The clash between digital tech and human psychology is one of the most exciting—and challenging—areas in modern clinical and social psychology. Social media hasn't just changed how we chat; it's completely reshaped the spaces where we build our sense of self, value, and emotional health (Valkenburg & Peter, 2009; Twenge *et al*., 2018) [31, 32]. This shift hits hardest for content creators, who don't just scroll—they put themselves out there, grow audiences, and often turn it into a livelihood.

India's creator economy shows this boom in action. It's grown 322% since 2020, now home to over 4 million creators—one of the biggest and fastest-growing groups worldwide (India Creator Economy Report, 2024) [15]. Nano-influencers, with 1,000 to 10,000 followers, make up about 70% of them, yet they've flown under the radar in psychological studies.

What sets nano-influencers apart isn't just their follower numbers—it's how deeply they engage. Unlike everyday users who mostly lurk with private profiles, these creators craft and share personal stories for the world to judge. And unlike big-shot macro- or mega-influencers (over 50,000 followers) with teams, sponsorships, and support, nano-influencers go it alone. They're in this in-between zone: public enough to feel the sting of audience feedback, but not famous enough for the perks that cushion the blows.

This spot creates real emotional stress worth studying. They live by the numbers—likes, comments, shares, followers—that feel like direct hits to their social worth, even if they're fickle. Algorithms add chaos: a post that blows up one day gets buried the next, making creators feel like they're at the mercy of invisible forces despite pouring in time and heart (Cotter, 2019) [6]. It's a setup ripe for "contingent self-esteem," where your sense of worth rides the waves of external feedback instead of coming from within (Crocker & Park, 2004) [7].

Self-esteem, as Rosenberg (1965) [24] described it, is that deep, steady feeling of your own value. It's a cornerstone of clinical psychology—when it's low, it links to depression, anxiety, isolation, and shaky resilience (Sowislo & Orth, 2013) [27]. Mental well-being goes beyond just "not being sick"; it's about feeling alive, purposeful, and connected, as measured by tools like the WEMWBS (Tennant *et al*., 2007) [29]. We've long known these two are linked in everyday folks, but not yet in content creators.

This study fills that gap by looking at self-esteem and mental well-being in Indian nano-influencers aged 18–35, and how they connect. It aims to give us solid starting data for a group whose inner worlds matter more every day—not

just for therapy, but for smarter app designs, public health strategies, and understanding digital work life.

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2. Statement of the Problem

Nano-influencers form the biggest chunk of India's massive creator community, and they're putting in emotionally intense work online every day. Yet, when it comes to understanding their inner psychological lives—the stresses, the highs, the toll it takes—academic research has pretty much ignored them. The studies we do have tend to focus on one of two extremes. On one side, there's research about everyday teens and young people who mostly just consume content, endlessly scrolling while grappling with too much screen time, constant comparisons to others' highlight reels, and the creeping onset of depressive feelings. On the other end, we have the glamorous world of top-tier influencers—think celebrities with millions of followers—who operate in a totally different reality, backed by managers, brands, and professional setups. This leaves a glaring hole in our knowledge: nano-influencers sit right in the middle. They bravely put their true selves out there for public eyes, sharing personal stories and building connections, but without any of the safety nets or resources that bigger creators enjoy. It's a group that's been overlooked for far too long.

What we really need to figure out are the specific ways that being a nano-influencer affects core parts of mental health, like self-esteem and overall well-being. Picture this: on one hand, there's something empowering about it—the creative freedom to express yourself authentically, the genuine bonds you form with a small but loyal community of followers who actually care about what you share. Could that act as a shield, helping them dodge the harsh self-judgment and negativity that hits passive social media users so hard? Or does it work the other way around? Maybe the nonstop pressure of performing for an audience—crafting posts, waiting anxiously for likes and comments, riding the rollercoaster of those metrics that feel like a direct report card on your worth—creates its own unique set of risks and vulnerabilities. These aren't just abstract ideas; they're questions with real-world stakes for therapists, counselors, and anyone helping people navigate mental health in our digital age. That's exactly what this study sets out to explore and answer.

3. Objectives of the Study

The present study was guided by the following specific objectives

1. To determine self-esteem levels among nano-influencers aged 18–35 years using the Rosenberg Self-Esteem Scale (RSES).
2. To assess mental well-being levels among nano-influencers aged 18–35 years using the Warwick-Edinburgh Mental Well-Being Scale (WEMWBS).
3. To examine the nature and magnitude of the relationship between self-esteem and mental well-being.
4. To investigate the moderating effects of demographic variables—specifically gender and follower count—on self-esteem and mental well-being outcomes.

4. Research Questions

1. What are the prevailing levels of self-esteem among nano-influencers aged 18–35 years?
2. What are the prevailing levels of mental well-being among nano-influencers aged 18–35 years?
3. Is there a statistically significant relationship between self-esteem and mental well-being?
4. Do gender and follower count significantly moderate self-esteem and mental well-being outcomes?

5. Hypotheses

H1 (Primary Hypothesis): There exists a statistically significant positive correlation between self-esteem and mental well-being among nano-influencers ($\rho \geq .30$, $p < .05$).

H0 (Null Hypothesis): No statistically significant correlation exists between self-esteem and mental well-being among nano-influencers.

H2: There are no statistically significant differences in self-esteem or mental well-being across gender groups.

H3: There are no statistically significant differences in self-esteem or mental well-being across follower count categories.

6. Operational Definitions

Self-Esteem: Operationalized as the total score obtained on the Rosenberg Self-Esteem Scale (RSES), scored on a 0–30 continuum. Interpretive categories follow Rosenberg's (1965) [24] guidelines: Low (≤14), Normal (15–24), High (≥25).

Mental Well-Being: Operationalized as the total score obtained on the Warwick-Edinburgh Mental Well-Being Scale (WEMWBS), scored on a 14–70 continuum. Interpretive categories: Low (≤22), Moderate (23–38), High (≥39).

Nano-Influencer: A content creator aged 18–35 years, actively maintaining a public social media presence on Instagram or YouTube, with a follower count of 1,000–10,000.

Active Content Creator: An individual who produces and publishes original content (photographs, videos, text, or multimedia) on social media platforms for audience consumption, as distinct from passive consumers who primarily view and interact with others' content.

7. Significance of the Study

This study matters on so many fronts, from cutting-edge science to real-life help for people and even big-picture policies. Let's break it down.

First, on the research side, it lays down essential baseline info about the mental and emotional lives of India's biggest group of digital creators—those nano-influencers who dominate the scene. Right now, there's a huge blind spot in social media psychology; studies just haven't caught up to this crowd. By digging in here, we're not only filling that gap but also stretching our understanding of self-esteem and well-being to a fresh, real-world group that's shaping how we all live online.

From a clinical angle, the results could spark tailored mental health tools designed just for nano-influencers. These folks face real emotional risks from their work—think constant feedback loops and public vulnerability—but they're often flying solo without access to therapists or support groups that get their unique world. This research could change that,

helping professionals create programs that actually fit their needs.

On the policy end, it gives hard data to push for better features on social platforms, like well-being check-ins or mental health resources built right into the apps. Imagine creator-focused initiatives from governments or companies that prioritize emotional health in this booming digital economy—our findings could make that a reality.

And theoretically, this opens the door to test some classic psychology ideas in a totally new setting: the wild ride of content creation. Take social comparison theory (Festinger, 1954) [12], which explains how we size ourselves up against others—does that play out differently when your "others" are both followers and algorithms? Or sociometer theory (Leary *et al*., 1995) [19], about how social approval acts like an inner gauge of our worth—how does that hold up amid likes, shares, and ghosted posts? Then there's self-determination theory (Deci & Ryan, 1985) [8], focusing on what fuels our motivation through autonomy, competence, and connection—can nano-influencers thrive on that in their DIY creative space, or does the pressure undermine it? Testing these frameworks here could reshape how we think about psychology in the digital age.

8. Scope and Delimitations

To keep things focused, this study zeroed in on 80 nano-influencers between 18 and 35 years old who are actively posting on Instagram and YouTube. We found them through convenience sampling right here in India—think reaching out to creators we could easily connect with via online communities and networks.

It's a cross-sectional snapshot, meaning we captured a picture of their self-esteem and mental well-being at one point in time. That lets us describe what's going on psychologically for this group right now, but it doesn't let us draw cause-and-effect arrows—like proving that content creation directly causes certain mental health patterns. Life's messier than that, and we'd need a longer-term or experimental setup for those kinds of conclusions.

We relied on self-report surveys, which are a tried-and-true staple in psychology research because they're efficient and direct. That said, people sometimes shape their answers to look better—social desirability bias is real, where folks might downplay struggles or amp up positives to fit what they think sounds good. So, take the results with that in mind.

Overall, interpret these insights thoughtfully, and don't stretch them too far when applying them to other groups, platforms, or ages. It's a solid starting point, but every study has its edges.

Review of Related Literature

1. Self-Esteem: Theoretical Foundations and Measurement

At the heart of modern psychology, Rosenberg's 1965 [24] idea of self-esteem holds strong: it's your overall, pretty steady attitude about your own value—feeling like you're worthy, able, and matter in the grand scheme. This isn't just a mash-up of how you rate yourself at work, in relationships, or looks; it's a higher-level judgment that pulls from those but stands on its own.

Leary and team (1995) [19] built on that with sociometer theory, framing self-esteem as your built-in social radar. It tracks how accepted or included you feel, dipping low with rejection vibes and perking up with belonging signals. For nano-influencers, this feels spot-on—those endless streams of likes, views, and comments act like a blinking dashboard of whether your audience is with you or scrolling past.

Years of long-term studies nail down low self-esteem as a red flag that predicts serious stuff down the line: major depression, anxiety disorders, even eating issues. This holds even after factoring in past mental health woes or your baseline grumpiness (Sowislo & Orth, 2013) [27]. Enter two big models: the vulnerability one says low self-esteem makes you more prone to breakdowns, like a weak foundation in a storm. The scar model flips it—depression leaves permanent marks, chipping away at your self-view. Data supports both, showing it's a back-and-forth loop (Orth & Robins, 2013) [21]. Therapists tuning into digital natives should flag this: self-esteem is a tweakable lever to pull for prevention and recovery.

Self-determination theory (SDT; Deci & Ryan, 1985, 2000) [8, 9] layers in even more insight for why creators might struggle or thrive. It splits our drives: intrinsic motivation comes from pure joy and alignment with what you truly value—no carrots or sticks needed. Extrinsic is all about external goodies like applause, money, or just avoiding shame. "Contingent self-esteem" is the risky spot where you bet your whole worth on nailing certain arenas, leading to fragile mental health, stress-fueled chasing instead of passionate flow, and a dimmer sense of happiness (Deci & Ryan, 2000) [9]. Imagine a nano-influencer whose mood yo-yos with every follower tick or engagement stat—they're walking that tightrope, wide open to these pitfalls.

2. Social Media Use and Self-Esteem: The Active–Passive Distinction

Researchers have poured over how time on social media ties into self-esteem, and one clear pattern jumps out: it all hinges on *how* you engage. Crunching data from tons of studies, meta-analyses reveal a small but steady drag on teens' self-esteem from general platform use ($r = -.18$). The culprit? Upward social comparison— that gut-punch habit of measuring yourself against people who seem hotter, more accomplished, or wildly popular, leaving you feeling lesser (Vogel *et al*., 2014; Yoon *et al*., 2019) [35, 36]. Festinger's social comparison theory from 1954 [12], dreamed up for everyday face-to-face judgments, translates perfectly to feeds packed with polished profiles. There, everyone's highlighting their best, artificially hiking the bar and making normal life look lackluster.

But here's the game-changer: those self-esteem hits aren't equal across the board. They pack the biggest punch for passive users—the endless scrollers, silent watchers, and lurkers who soak up others' content without posting or interacting. Jump into active mode—making your own posts, dropping comments, forging real conversations—and the picture flips to neutral or even uplifting effects. This might come from feeling more capable (self-efficacy), backed by a sense of community support, or simply getting a clearer grip on who you are (Valkenburg & Peter, 2009; Fardouly & Vartanian, 2015) [11, 32]. Grasping this active-passive split is crucial for nano-influencers, who live in the active zone as hands-on creators, not armchair observers.

Spotlight studies on influencers are still budding, but they're shedding real light. Prialé *et al*. (2022) [22] showed that influencers build sharper identities and a more defined sense of self compared to folks who don't create content. It makes

sense: putting your world out there publicly helps solidify who you are and what you stand for. On the flip side, there's "influencer dysmorphia"—that creeping discontent from eyeing other creators' flawless, Photoshopped visuals, which can stir up body image woes and nagging self-doubt (Kleemans *et al*., 2018) [18]. Nano-influencers, though, often lean into raw, unedited realness, which could buffer them somewhat from those toxic comparisons.

3. Mental Well-Being: Conceptualization and the WEMWBS

Mental Well-Being: Beyond Just "Not Being Sick"

Mental well-being goes way further than the basic idea of mental health as simply dodging disorders or symptoms. It's about the bright side of how our minds thrive. Keyes' dual-continua model (2002) [16] paints it as two separate tracks running side by side: one tracks the slide from full-blown mental illness to feeling okay (no big problems), while the other spans from just getting by ("languishing") to truly thriving ("flourishing"). That flourishing sweet spot? It's packed with positive emotions, deep engagement in life, strong bonds with others, a clear sense of purpose, and real achievements. People who hit this level often enjoy better physical health, act kindlier toward others, and bounce back stronger from tough times.

To measure this reliably, the Warwick-Edinburgh Mental Well-Being Scale (WEMWBS; Tennant *et al*., 2007) [29] steps in as a gold-standard tool. It blends hedonic well-being—the feel-good stuff like joy, happiness, and life satisfaction—with eudaimonic elements, the deeper fulfillments like finding purpose, growing as a person, nurturing positive relationships, owning your choices (autonomy), and mastering your surroundings. Born and tested with UK adults, it's proven tough and adaptable across cultures and groups (Maheswaran *et al*., 2012) [20]. In our study, it lets us peek into nano-influencers' well-being from emotional, thinking, and social angles all at once—giving a full, rounded view.

Study after study pins self-esteem as a powerhouse driver of mental well-being. Ryan and Deci (2001) [25] explain it like this: when you feel solid about yourself, you get this inner safety net. It frees you to show up authentically in relationships, adapt smoothly to challenges, and regulate your emotions without rigidity. For social media folks, jumping in actively correlates with better well-being ($r = .22$), especially when it sparks genuine community ties and that warm glow of contributing something meaningful (Valkenburg *et al*., 2022) [34].

4. Influencer Mental Health: Emerging Research

Influencer Mental Health: Emerging Stressors and Tier Differences

Lately, scientists are turning more eyes to social media influencers' mental health, but the field is still young and a bit all-over-the-place in methods. A deep dive review by Cataldo *et al*. (2021) [5] spotlighted unique pressures these creators face: the grind of always performing, juggling audience expectations, losing bits of personal privacy, and wrestling with how "real" to keep their online self versus what sells.

Pew Research Center's 2021 report drove it home: most creators feel stressed about keeping fans hooked, and "influencer burnout" is now a thing— that draining combo of emotional fatigue, pulling away from your own passion, and feeling like you're not achieving anymore, all from the nonstop churn of making content.

A key insight? Mental health looks different depending on your influencer level. Big-league macro- and mega-influencers (over 100,000 followers) deal with intense public glare, online abuse, and identity squeezes—but they often have managers, therapists, or brand buffers (Duffy & Pruchniewska, 2017) [10]. Micro-influencers (10,000–100,000) sit in the middle: tight-knit niche fans, some income pressure, but manageable scale. Nano-influencers stand apart with super-close audience bonds, no big money hopes, and a focus on keeping it genuine. On paper, this setup screams potential for good vibes—like real connections boosting well-being—but no one's really tested it yet.

Brewer's optimal distinctiveness theory (1991) [4] gives a smart lens for why follower numbers might tip the scales on mental health. It says we all crave a sweet spot: enough belonging (through fitting into a group) to feel secure, balanced with enough uniqueness (standing out) to feel special. For nano-influencers with 1,000–5,000 followers, that "just right" zone could shine—big enough for meaningful feedback and a hit of "I'm making a difference," but small enough to skip the alienation, fake-it-till-you-make-it stress, or celebrity overload that comes with massive crowds.

5. Theoretical Integration

Pulling It All Together: What the Theories Predict for Nano-Influencers

When you weave together all these frameworks we've explored, they paint a clear, unified picture of how nano-influencers might be faring psychologically—and what we should expect to find. It's like the theories are handing us a roadmap with specific signposts to watch for.

Self-determination theory points to creators who are in it for the right reasons: they're driven by their own passions (autonomous motivation), pouring out their true selves without a mask (authentic expression), and feeling genuinely capable (competence) while building real bonds with their audience (relatedness). For them, the payoff should be stronger mental well-being overall and a steadier sense of self-worth that doesn't yo-yo wildly.

Sociometer theory zooms in on those digital signals—likes, comments, shares, follower ticks—as modern-day barometers of belonging. Every ping or silence becomes a quick read on whether your audience is vibing with you, nudging your moment-to-moment self-esteem up or down like a live social pulse.

Social comparison theory adds the wrinkle of who you're measuring against. If nano-influencers mostly look upward—at flashier creators with bigger numbers—they might feel deflated. But if their lens tilts downward (toward folks just starting out or struggling more), it could actually lift their spirits. The direction of those comparisons becomes a key moderator shaping how solid their self-esteem stays.

Finally, that active-versus-passive divide from social media studies gives nano-influencers a natural edge. As hands-on creators—not just endless scrollers—they tap into boosts like greater self-efficacy, real support networks, and a sharper sense of identity. This could mean they come out ahead with healthier self-esteem and well-being compared to passive users who just consume.

This study puts all these predictions to the test with a real Indian nano-influencer group—our first solid empirical

check-in on how these ideas play out in this unique world. We'll circle back in Section V to unpack the results through each of these lenses, seeing what holds up and what surprises us.

Research Methodology

1. Research Design

We went with a quantitative, cross-sectional, correlational approach—perfectly suited to our goals of painting a clear picture of nano-influencers' psychological landscape at one moment and exploring how things like self-esteem and mental well-being connect (or don't). This type of design shines when you want to gauge how common certain traits are in real-world groups and map out relationships between variables, all without trying to prove one causes the other. It's become a go-to in social media psychology studies, giving reliable snapshots of how people experience platforms in their everyday lives (Kircaburun *et al*., 2020) [17].

Data collection ran from October 2025 through February 2026 using a straightforward online survey platform—Google Forms. This let us reach creators across India efficiently, gathering responses at their convenience while keeping everything secure, anonymous, and easy to analyze.

2. Variables of Study

Table 1: Variables of Study

Variable Type	Variable	Measurement	Scale Level
Dependent	Self-Esteem	RSES (0–30)	Interval
Dependent	Mental Well-Being	WEMWBS (14–70)	Interval
Independent	Gender	Male/Female	Nominal
Independent	Follower Count	Three categories	Ordinal

3. Participants

Our final group for analysis included 80 nano-influencers between 18 and 35 years old (with an estimated average age around 23.4). We reached out to them through convenience sampling—posting calls in social media groups, creator communities, and direct messaging on platforms where they're active. This gave us a real slice of India's nano-creator world.

The group was 45 males (56.3%) and 35 females (43.7%). Most had some college under their belts: 65% were undergraduates, while 35% had postgraduate degrees. When it came to platforms, Instagram ruled the roost with 85% of participants, and YouTube trailed at 15%—mirroring how Instagram tends to be the go-to home for smaller Indian creators.

Follower counts spread out like this: 67.5% had under 1,000 followers, 25% sat between 1,000–5,000, and 6.25% edged just over 10,000. Their time as creators varied too: 35% were newbies with less than 6 months under their belt, 18.75% had 6–12 months, 31.25% were in the 1–3-year range, and 15% had been at it for over 3 years. This mix captures everyone from fresh faces to more seasoned small-scale creators.

Out of 92 people who started the survey, we kept 80 for the deep dive (an 86.9% completion rate). We had to say goodbye to 12 responses for good reasons: 8 didn't finish key scales, 2 were outside our 18–35 age window, and 2 showed random, straight-line answers that screamed "not serious." Everyone who made the cut gave their full, voluntary informed consent digitally before diving in—keeping things ethical and respectful from the start.

4. Inclusion and Exclusion Criteria

Inclusion criteria required participants to: (a) be aged 18–35 years; (b) self-identify as an active content creator on Instagram or YouTube; (c) maintain a public-facing social media profile; and (d) have been actively creating content for at least 3 months. Exclusion criteria comprised: (a) incomplete survey responses; (b) age outside the specified range; and (c) identification as a professional media personality with full-time agency representation.

5. Instruments

Rosenberg Self-Esteem Scale (RSES; Rosenberg, 1965) [24]

The RSES is a gold-standard, 10-question self-report survey that captures your overall sense of self-worth. People rate each statement on a 0-3 scale (0 = Strongly Agree, 3 = Strongly Disagree), with items 2, 5, 6, 8, and 9 flipped in scoring (reverse-scored). Total scores run from 0 to 30—higher numbers mean stronger, more stable self-esteem.

This scale's a worldwide favorite in psychology because it delivers rock-solid results: excellent internal consistency (α usually .85–.92), reliable over time (test-retest), and strong connections to other valid self-esteem measures across cultures and groups (Schmitt & Allik, 2005) [26]. In our study with nano-influencers, it performed beautifully with α = .88—meaning all the questions worked together smoothly to give us trustworthy data.

Warwick-Edinburgh Mental Well-Being Scale (WEMWBS; Tennant *et al*., 2007) [29]

The WEMWBS is a 14-item questionnaire that paints a complete picture of mental well-being—not just "feeling okay," but actually thriving. All questions focus on positive experiences, blending hedonic aspects (joy, life satisfaction, positive emotions) with eudaimonic ones (purpose, engagement with life, strong relationships, personal growth).

Participants rate each item on a 1-5 scale (1 = None of the time, 5 = All of the time), creating total scores from 14 to 70—higher scores signal richer well-being across emotional, social, and personal domains. It's proven reliable (α = .87–.91), works well across different cultures, and even picks up positive changes from mental health programs (Stewart-Brown *et al*., 2011) [28]. With our creators, it showed excellent internal consistency at α = .89.

6. Ethical Considerations

Ethics: Keeping Trust and Safety First

The study passed full ethical review from Amity University Lucknow Campus's institutional board, ensuring everything met the highest research standards. We made participation completely optional—anyone could join or leave at any moment, no questions asked, no hard feelings.

Privacy came first: we stripped all names, handles, or other identifying details from the data before any analysis began, keeping responses completely anonymous. Everyone started with a clear digital consent form right in the Google Form—they had to actively agree to the study's purpose, risks, benefits, and their rights before seeing a single survey question.

No incentives or payments were offered, so participation came purely from interest in supporting creator mental health research. All data lives in secure, password-protected storage, accessible only to our core research team, with no sharing beyond aggregated, de-identified findings.

7. Data Collection Procedure

The survey instrument was distributed via a Google Form link shared through targeted social media outreach on Instagram and YouTube creator communities, snowball referral through initial participants, and direct messaging to publicly identifiable nano-influencers meeting inclusion criteria. The survey required approximately 10–15 minutes to complete and included: (a) an informed consent statement; (b) a demographic information section; (c) the RSES; and (d) the WEMWBS. Scale item order was randomized within each instrument to minimize order effects. Data collection occurred across two academic semesters (October 2025–February 2026).

8. Statistical Analysis

Data Analysis: Unpacking the Numbers Step by Step

We crunched the numbers using IBM SPSS Statistics Version 25.0, following a clear four-step roadmap to make sure every analysis was rock-solid and appropriate for our data.

Step 1: Getting the lay of the land

First, we calculated basic descriptive stats for both scales—means and standard deviations to show average self-esteem and well-being levels, frequency distributions to see how scores spread out, and skewness checks to spot any lopsided patterns.

Step 2: Checking normality (the "bell curve" test)

Next, we ran Shapiro-Wilk tests ($\alpha = .05$) on both scales to see if scores followed a normal distribution. This test is the gold standard for smaller samples like ours (N = 80) because it has better statistical power than alternatives like Kolmogorov-Smirnov, especially when $n \leq 100$ (Razali & Wah, 2011) [23].

Step 3: Testing our main hypothesis

Our core question—does self-esteem predict mental well-being? —got tested with Spearman's rank-order correlation (ρ). We chose this non-parametric approach because the RSES scores showed non-normal distribution (those Shapiro-Wilk results flagged it).

Step 4: Group comparisons

To see if gender made a difference, we used the Mann-Whitney U test. For follower count groups (under 1K, 1-5K, 5K+), we ran Kruskal-Wallis H tests. Both are robust non-parametric choices perfect for ordinal data or when normality assumptions break down. We also calculated effect sizes wherever group differences popped up, so you'd know just how meaningful any gaps were.

This methodical approach ensured our conclusions rested on stats that matched our data's real behavior—not forced into unrealistic "normal" assumptions.

Results and Analysis

1. Descriptive Statistics

Descriptive statistics for the RSES and WEMWBS total scores are presented in Table 2. RSES scores ranged from 5 to 30 (M = 16.74, SD = 4.62), with a mild positive skew (.12), suggesting near-symmetrical distribution with a slight preponderance of scores above the mean. WEMWBS scores ranged from 16 to 54 (M = 36.36, SD = 7.36), exhibiting a mild negative skew (−.45), indicating a slight clustering of scores in the moderate-to-high well-being range.

Table 2: Descriptive Statistics for RSES and WEMWBS (N = 80)

Variable	Min	Max	Mean	SD	Skewness
RSES Total	5	30	16.74	4.62	.12
WEMWBS Total	16	54	36.36	7.36	-.45

Frequency distribution analysis indicated that the majority of participants fell within the Normal self-esteem category (72.5%; n = 58), with 21.2% (n = 17) classified as Low and 6.2% (n = 5) as High. For mental well-being, the predominant category was Moderate (51.2%; n = 41), followed by High (45.0%; n = 36), and Low (3.8%; n = 3). Taken together, 96.2% of participants reported moderate-to-high mental well-being, indicating a generally healthy psychological profile within this sample.

2. Normality Testing

The Shapiro-Wilk test was applied to both scale distributions. Results indicated a statistically significant departure from normality for RSES scores (W = .891, df = 80, $p < .001$), while WEMWBS scores did not significantly deviate from normality (W = .983, df = 80, $p = .378$). Given the violation of normality for at least one variable, non-parametric statistical procedures were employed for all subsequent analyses, consistent with recommended practice (Field, 2018) [13].

Table 3: Shapiro-Wilk Normality Test Results (N = 80)

Variable	W	df	p	Decision
RSES Total	.891	80	< .001	Non-normal — use non-parametric
WEMWBS Total	.983	80	.378	Normal distribution

3. Primary Hypothesis: Spearman Rank-Order Correlation

Spearman's rho correlation analysis was conducted to examine the relationship between self-esteem (RSES) and mental well-being (WEMWBS). Results revealed a statistically significant moderate-to-strong positive correlation ($\rho = .611$, $p < .001$), supporting H1. This correlation indicates that approximately 37.3% of variance in mental well-being scores is accounted for by self-esteem scores ($r^2 = .373$), suggesting a clinically meaningful and practically significant association.

Table 4. Spearman Rank-Order Correlation: RSES and WEMWBS

	RSES Total	WEMWBS Total
RSES Total (ρ)	1.000	.611**
Sig. (2-tailed)	—	.000
N	80	80
WEMWBS Total (ρ)	.611**	1.000
Sig. (2-tailed)	.000	—
N	80	80

** Correlation significant at the .001 level (2-tailed)

4. Gender Comparisons: Mann-Whitney U Test

Mann-Whitney U tests were conducted to examine gender differences in RSES and WEMWBS scores. Male participants (n = 45) demonstrated marginally higher mean rank scores on both RSES (44.29 vs. 35.63) and WEMWBS (44.33 vs. 35.57) relative to female participants (n = 35). However, neither difference attained statistical significance at the .05 level (RSES: U = 617.0, z = −1.675, p = .094; WEMWBS: U = 615.0, z = −1.676, p = .094), indicating that gender does not significantly moderate self-esteem or mental well-being in this sample.

Table 5: Mann-Whitney U Test: Gender Differences (N = 80)

Variable	Male Mean Rank	Female Mean Rank	U	z	p
RSES Total	44.29	35.63	617.0	-1.675	.094
WEMWBS Total	44.33	35.57	615.0	-1.676	.094

5. Follower Count Comparisons: Kruskal-Wallis H Test

Kruskal-Wallis H tests were conducted to examine differences in RSES and WEMWBS scores across three follower count categories: <1,000 (n = 54), 1,000–5,000 (n = 20), and >10,000 (n = 5). Participants in the 1,000–5,000 follower category yielded the highest descriptive mean ranks on both RSES (50.64) and WEMWBS (47.50), followed by the <1,000 category (RSES: 36.94; WEMWBS: 38.67) and >10,000 category (RSES: 36.30; WEMWBS: 30.90). However, neither comparison attained statistical significance (RSES: H (2) = 5.572, p = .062; WEMWBS: H (2) = 3.107, p = .212).

Table 6: Kruskal-Wallis H Test: Follower Count Differences (N = 80)

Variable	<1,000	1,000–5,000	>10,000	H(2)	p
RSES (Mean Rank)	36.94	50.64	36.30	5.572	.062
WEMWBS (Mean Rank)	38.67	47.50	30.90	3.107	.212

Although these differences did not reach the conventional alpha level of .05, the near-significant trend for RSES (p = .062) suggests that follower count may exert a meaningful influence on self-esteem that future studies with larger and more balanced samples may be better positioned to detect. The trend toward higher psychological functioning in the mid-range follower group (1,000–5,000) merits theoretical attention, discussed in Section V.

Discussion

1. Interpretation of Primary Findings

The main finding of this study—a statistically significant and moderately strong positive relationship between self-esteem and mental well-being (ρ = .611, p < .001)—aligns with a wide range of existing research that identifies self-esteem as a key factor influencing psychological well-being across different groups (Baumeister *et al*., 2003; Sowislo & Orth, 2013) [2, 27]. Interestingly, the strength of this relationship is somewhat higher than what is usually reported in general populations (r = .40–.50). This difference may be explained by the unique context of nano-influencers, whose lives are closely tied to public self-presentation and constant social feedback. Because their self-image is regularly shaped by visible metrics such as likes, comments, and follower counts, the link between how they view themselves and how they feel psychologically may become more intense compared to individuals who do not face such continuous evaluation.

Another notable finding is that a majority of participants (72.5%) reported having normal levels of self-esteem. This stands in contrast to research on adolescents using social media, where higher levels of low self-esteem (around 30–40%) are often observed among frequent users (Twenge & Campbell, 2019; Valkenburg *et al*., 2021) [30, 33]. One possible explanation is that creating content actively, rather than passively consuming it, may foster a sense of achievement and competence. Successfully producing content, building an audience, and expressing creativity can provide meaningful positive feedback about oneself, which may strengthen self-esteem (Bandura, 1997) [1]. In addition, nano-influencers often develop closer and more authentic connections with their audiences, which can offer genuine validation and reinforce a stable sense of self-worth. Over time, this consistent engagement in creative work may also help individuals develop a clearer and more coherent sense of identity, which can protect against fluctuations in self-esteem.

The finding that 96.2% of participants reported moderate to high levels of mental well-being is particularly striking and should be interpreted carefully. This result is in line with studies suggesting that actively engaging on social media can have psychological benefits compared to passive use, such as increased feelings of connection, purpose, and self-expression (Valkenburg *et al*., 2022) [34]. For nano-influencers, content creation may provide a sense of meaning and fulfillment, as it involves creativity, goal-setting, and contributing to a community. This aligns with self-determination theory, which emphasizes the importance of fulfilling basic psychological needs—autonomy, competence, and relatedness—for overall well-being (Ryan & Deci, 2001) [25].

However, it is important not to assume that nano-influencers are free from psychological challenges. The fact that 21.2% of participants were found to have low self-esteem is still significant. When considered in the context of India's large creator population—estimated at over 4 million—this percentage represents a considerable number of individuals who may be at risk for mental health concerns. Additionally, since this study used a cross-sectional design, it cannot capture how self-esteem may change over time, particularly as follower counts increase or decrease. The use of a convenience sample may also mean that individuals who are more psychologically stable were more likely to participate, potentially leading to an overly positive picture of overall well-being.

2. Gender Findings

The lack of statistically significant gender differences in both self-esteem (p = .094) and mental well-being (p = .094) stands in contrast to earlier research, which often shows that women are more negatively affected by social media, particularly due to appearance-based comparisons and body image concerns (Fardouly & Vartanian, 2015; Kleemans *et al*., 2018) [11, 18]. There are a few possible reasons for this finding.

First, the p-value being close to the conventional significance threshold (.05) suggests that gender differences may still exist, but the current sample size may not have been large enough to detect them with confidence. A post-hoc power analysis indicates that a larger sample—around 120 participants—would likely be needed to reliably capture effects of this size with adequate statistical power ($1-\beta$ = .80).

Another possible explanation relates to the nature of nano-influencers themselves. Unlike passive social media users, nano-influencers actively create and control their content. This sense of ownership over their online identity may reduce the impact of harmful comparison processes. In particular, female nano-influencers may benefit from shaping their own narratives rather than simply consuming idealized images created by others. This active role could provide a sense of control and psychological agency, which may help buffer against the gender differences in self-esteem and well-being that are commonly observed in more passive social media contexts.

3. Follower Count and Optimal Distinctiveness

Although the differences were not statistically significant (p = .062 for self-esteem and p = .212 for well-being), the descriptive trend showing the highest scores in the 1,000–5,000 follower range is still meaningful and worth interpreting. This pattern can be understood using Brewer's (1991) [4] optimal distinctiveness theory, along with the idea of "Goldilocks engagement."

According to optimal distinctiveness theory, individuals feel most psychologically comfortable when they are able to balance two key needs: belonging to a group and maintaining a sense of individuality. When applied to social media, this suggests that having too few followers (below 1,000) may not provide enough social validation to meet one's need for connection. On the other hand, having a very large audience (above 10,000) may lead to reduced personal interaction, increased public scrutiny, and greater pressure to perform, all of which can negatively affect authenticity and well-being.

In contrast, the mid-range follower group (1,000–5,000) may represent a kind of "sweet spot." At this level, creators are likely to receive meaningful feedback and recognition while still maintaining close, authentic interactions with their audience. This balance may help support both self-esteem and overall well-being. Such an interpretation aligns with qualitative findings that highlight how nano-influencers often value genuine community connections as a key source of motivation and personal fulfillment (Duffy & Pruchniewska, 2017) [10].

Even though these findings did not reach statistical significance, they point toward an interesting trend that deserves further exploration. Future studies with larger sample sizes and more detailed follower categories could help determine whether this pattern becomes statistically significant and more robust over time.

4. Theoretical Implications

The present findings have several theoretical implications for psychology's understanding of digital identity and well-being. First, they extend Rosenberg's (1965) [24] conceptualization of self-esteem as a stable evaluative disposition to the digital creator context, demonstrating that the self-esteem/well-being relationship documented in offline populations is preserved—and possibly strengthened—in this novel environment. Second, the findings support self-determination theory's prediction that active, autonomy-supporting engagement with one's social environment (in this case, content creation) is associated with psychological flourishing. Third, the active–passive distinction central to social media psychology research is indirectly supported: nano-influencers' predominantly healthy psychological profile contrasts with the negative outcomes typically documented for passive heavy social media users.

Fourth, the findings invite further theoretical development regarding the concept of 'digital self-esteem'—the degree to which self-worth is tied to online performance metrics. The correlation strength observed here (ρ = .611) may partly reflect the elevated self-evaluative salience of the nano-influencer role: when self-worth is implicated in a domain as publicly visible and quantitatively feedback-rich as social media follower counts, the relationship between self-esteem and well-being may be more tightly coupled than in domains where performance feedback is less salient or frequent.

5. Clinical and Applied Implications

These findings carry important clinical implications. The strong positive relationship between self-esteem and mental well-being suggests that improving self-esteem should be a primary focus in interventions designed for nano-influencers. Therapeutic approaches such as cognitive-behavioral therapy (CBT), which works on identifying and restructuring negative core beliefs about self-worth and social acceptance (Beck, 2011) [3], can be particularly useful. Similarly, acceptance and commitment therapy (ACT), which encourages individuals to reduce experiential avoidance and engage in actions aligned with their personal values (Hayes *et al*., 2012) [14], may be well-suited to addressing the emotional challenges associated with content creation and public evaluation.

At the platform level, these results highlight the need for creator-focused well-being initiatives. One key concern is the tendency for creators to tie their self-worth to performance metrics such as likes, comments, and follower counts. Interventions aimed at reducing this "metric-based self-worth" could be beneficial. For example, features like hiding public like counts, limiting follower growth notifications, or reducing comparative analytics could help minimize unhealthy social comparison and pressure. Additionally, building peer support systems that connect nano-influencers with one another or with mental health resources could provide meaningful and accessible support, especially given the community-oriented nature of this group.

For clinicians, it is important to recognize that social media performance may act as a source of contingent self-esteem for clients who are content creators. This can influence emotional stability, goal-setting patterns, and even interpersonal relationships. As part of assessment and treatment planning, clinicians should explore how strongly a

client's sense of self-worth is linked to their online performance. Understanding these digital self-esteem dynamics can offer valuable insight into their psychological functioning and help guide more tailored and effective interventions.

6. Limitations

Several limitations should be considered when interpreting and generalizing the findings of this study. First, the cross-sectional nature of the research makes it impossible to draw conclusions about causality. It remains unclear whether higher self-esteem leads to better mental well-being, whether well-being enhances self-esteem, or whether both are influenced by other factors such as personality traits (e.g., positive affect) or levels of social support. Longitudinal studies that follow creators over time—especially across changes in follower growth—would provide clearer insight into these relationships.

Second, the use of convenience sampling raises the possibility of selection bias. Individuals experiencing greater psychological distress may have been less likely to participate in a voluntary study, which could result in an overrepresentation of participants with relatively positive mental health.

Third, although self-report measures are widely used in psychological research, they are not without limitations. Responses may be influenced by social desirability bias, where participants present themselves in a more favorable light. This concern may be particularly relevant for nano-influencers, who are already accustomed to managing their public image.

Fourth, the distribution of follower counts in the sample was uneven, with 67.5% of participants having fewer than 1,000 followers. This means that a large portion of the sample does not strictly meet the conventional definition of nano-influencers, which may introduce variability within the group and affect the consistency of the findings.

Fifth, the heavy reliance on Instagram users (85% of the sample) limits the applicability of the results to creators on other platforms such as YouTube, X (formerly Twitter), TikTok, or LinkedIn, where engagement styles and audience dynamics may differ.

Finally, since the sample was drawn exclusively from India, the findings may not fully generalize to creators in other cultural contexts, where social media use, self-expression, and perceptions of self-worth may vary.

Conclusion and Recommendations

1. Summary of Findings

This study explored levels of self-esteem and mental well-being among 80 Indian nano-influencers between the ages of 18 and 35, using the Rosenberg Self-Esteem Scale and the Warwick-Edinburgh Mental Well-Being Scale. Overall, the findings suggest a largely positive psychological profile within this group. Most participants reported normal levels of self-esteem (72.5%) and moderate to high levels of mental well-being (96.2%), indicating general resilience.

A key result of the study was the statistically significant, moderately strong positive relationship between self-esteem and mental well-being ($\rho = .611$, $p < .001$). This supports the main hypothesis and highlights self-esteem as an important factor contributing to psychological well-being among nano-influencers.

No significant differences were found based on gender or follower count. However, some trends in these comparisons approached statistical significance, suggesting that these factors may still play a role and should be examined more closely in future research with larger and more diverse samples.

2. Recommendations

Based on the findings of this study, several practical recommendations can be made:

1. **Develop targeted mental health support:** Clinical services and mental health platforms should design resources specifically for nano-influencers, taking into account the unique psychological pressures of content creation. Strengthening self-esteem should be a central focus of these interventions.

2. **Test evidence-based therapies:** Interventions that focus on self-esteem—particularly those based on cognitive-behavioral therapy (CBT), acceptance and commitment therapy (ACT), and compassion-focused therapy (CFT)—should be systematically tested within nano-influencer populations through randomized controlled trials to establish their effectiveness.

3. **Introduce platform-level well-being features:** Social media platforms should consider implementing features that reduce the tendency to link self-worth with performance metrics. Options such as hiding like counts, limiting follower growth notifications, and including regular well-being check-ins could help support healthier engagement.

4. **Expand future research approaches:** Future studies should adopt longitudinal designs to better understand how self-esteem and well-being change over time, particularly as follower counts increase or fluctuate. In addition, qualitative research could provide deeper insight into how nano-influencers interpret and emotionally respond to audience feedback and engagement metrics.

5. **Enhance professional training:** Educational programs that train mental health professionals should incorporate topics related to digital identity and social media psychology. This would better prepare clinicians to work effectively with individuals involved in content creation.

6. **Re-examine follower count effects:** The near-significant trend related to follower count ($p = .062$) should be explored further using larger and more balanced samples. This would help determine whether mid-range follower groups (1,000–5,000) consistently show better psychological outcomes.

3. Concluding Remarks

India's rapidly expanding digital creator economy is not simply a technological or economic shift—it represents a profound psychosocial transformation. It is redefining how millions of individuals construct identity, experience belonging, and measure their self-worth. At the center of this transformation are nano-influencers, whose everyday engagement in public self-presentation is at once creative,

relational, and psychologically demanding. The findings of this study offer a cautiously optimistic perspective: despite the pressures of constant visibility and evaluation, most nano-influencers demonstrate healthy levels of self-esteem and mental well-being. This underscores a remarkable capacity for resilience, suggesting that individuals are not merely passive subjects of algorithmic systems, but active agents capable of building meaning, connection, and identity within them.

However, this resilience should not be overstated. The presence of low self-esteem in over one-fifth of the sample—and the strong association between self-esteem and mental well-being—highlights a critical vulnerability within this population. For these individuals, the same digital environments that enable expression and connection may also intensify self-doubt and psychological strain. This duality positions self-esteem not just as a variable of interest, but as a pivotal point for intervention.

As India's creator economy continues its rapid expansion, the mental well-being of its participants must be treated as a central concern rather than an afterthought. Supporting nano-influencers is not only a clinical necessity but also a societal responsibility. The sustainability of this digital ecosystem ultimately depends not just on engagement metrics or economic growth, but on the psychological health of the individuals who bring it to life.

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