

From Skin to Self: A Neurocognitive–Psychological Taxonomy of Tattoo Motivation among Generation Z

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Abstract: Tattooing has progressively shifted from a socially marginal form of body modification toward a mainstream practice of symbolic self-expression, identity construction and social communication. National survey evidence now places tattoo prevalence among U.S. adults under 30 at roughly two in five, with women aged 18–29 substantially more likely to be tattooed than men in the same cohort (Pew Research Center, 2023). Existing scholarship has identified diverse motives for tattooing, including uniqueness, self-expression, appearance, affiliation, emotional expression, religious meaning and social influence. However, these motivations have generally been examined as separate psychological or sociological phenomena, with limited integration of developmental neuroscience, social cognition and identity-based decision-making. In particular, the literature does not yet provide a comprehensive, empirically testable taxonomy explaining why members of Generation Z choose to permanently inscribe particular meanings onto their bodies.

This article develops a neurocognitive and psychological framework for explaining tattoo motivation among Generation Z. Drawing on research in body modification, identity formation, social influence, reward processing, self-referential cognition, attachment, intrinsic motivation and lived religion, the study proposes four primary motivational profiles: Relational–Affiliative Inscription, Sacred–Transcendent Inscription, Identity–Autonomous Inscription, and Social–Normative/Status Inscription. A fifth mechanism, Experiential–Affective Inscription, is proposed as a cross-cutting pathway rather than a mutually exclusive category, because emotional regulation, sensation seeking and transformation may operate across the four principal profiles.

The proposed Neurocognitive Body-Inscription Model (NBIM) conceptualizes tattoo decision-making as a sequential process in which an internal or social cue is evaluated through personal meaning, identity relevance, anticipated emotional value, social valuation and perceived permanence. These processes contribute to subjective utility and behavioural intention, followed by reinforcement through memory, identity consolidation and social feedback. The framework does not claim that specific brain regions independently “cause” particular tattoo motivations; rather, it integrates established neural systems involved in self-referential processing, social cognition, reward valuation and affective salience.

The article proposes a mixed-method empirical design combining psychometric measurement, latent profile analysis, structural equation modelling and, in a subsequent subsample, neurophysiological validation. The resulting taxonomy could contribute to behavioural science, consumer psychology, body-image research, developmental neuroscience and the emerging literature on neuro consumer behaviour, while providing a methodological basis for distinguishing intrinsic identity-driven tattooing from socially induced or norm-sensitive tattoo adoption.

Keywords: Generation Z; tattoo motivation; body modification; identity; social influence; neurocognition; reward processing; self-reference; attachment; religiosity; latent profile analysis; behavioural neuroscience.

1. INTRODUCTION

The human body is not merely a biological structure; it is also a social, symbolic and psychological medium through which individuals communicate identity, affiliation, values and personal history. Tattooing represents one of the most permanent forms of such bodily communication. Unlike temporary fashion consumption, a tattoo involves an enduring alteration of bodily appearance, financial expenditure, physical discomfort and potential social consequences. Consequently, the decision to obtain a tattoo provides an unusually rich behavioural setting for examining how individuals transform abstract psychological values into permanent bodily action.

Earlier scholarship treated tattooing primarily as a form of deviance, rebellion or subcultural membership. Contemporary research, however, indicates that tattooing has become substantially mainstreamed and is associated with identity, uniqueness, appearance and emotional symbolism. Wohlrab, Stahl and Kappeler's review identified ten broad motivational categories underlying tattooing and piercing, demonstrating that body modification cannot be reduced to a single psychological motive.

Empirical work subsequently demonstrated that tattooed individuals may have a stronger need for uniqueness than non-tattooed individuals. Tiggemann and Golder found that need for uniqueness was associated with tattooing, while Tiggemann and Hopkins similarly concluded that tattooing can function as a bodily expression of uniqueness. More recent research has further supported a multifaceted relationship between need for uniqueness and body modification: Weiler et al. found that different components of uniqueness motivation were differentially associated with tattooing and other forms of body modification.

At the same time, tattooing cannot be interpreted solely through individualistic self-expression. Religious and spiritual tattoos provide evidence that the body can become a site for materializing transcendent beliefs and lived religion. Koch and Roberts demonstrated associations between religious belief/practice and tattoo-related behaviour, while subsequent research has shown that religious tattoos can function as expressions of asceticism, calling, assurance and anxiety concerning religious meaning. Morello and de Paula's more recent qualitative work suggests that tattoo artists themselves may participate in the negotiation and construction of religious meaning surrounding tattoos.

A third dimension concerns relationships. Tattoos can encode romantic relationships, friendship, family, remembrance and affiliation; here the tattoo is not primarily an expression of "self versus others," but rather the body becomes a permanent repository of relational significance. Naude and Naudé's 2024 narrative-identity study of tattooed South African university students found, using reflective writing and semi-structured interviews, that participants used tattoos to express agency and unique identity while also representing communion, affiliation and intimacy with others — empirical support for treating relational and identity motives as distinguishable but co-occurring.

A fourth dimension concerns social influence. The contemporary young adult does not make identity decisions in an informational vacuum. Digital platforms expose individuals continuously to peers, influencers, celebrities, subcultures and visual norms. Developmental neuroscience provides a particularly relevant theoretical basis: peer observation has been shown to increase activation in reward-related regions, including the ventral striatum, among adolescents and young adults. Social influence has also been associated with neural systems involved in mentalising, social reward and self-control.

Accordingly, the central unresolved issue is more complex than merely asking:

"Why do people get tattoos?"

The more theoretically important question is:

"What psychological and neurocognitive decision architectures transform a social, emotional, relational, spiritual or identity-related representation into a permanent decision to inscribe the body?"

The present article develops a framework for examining this question.

2. EMPIRICAL GROUNDING: CURRENT PREVALENCE AND MOTIVATIONAL DATA

Before developing the theoretical taxonomy, it is necessary to anchor the discussion in verifiable, current population-level data, since motivational theorizing about a behaviour whose base rate is unknown risks theoretical overreach.

Prevalence. The most methodologically robust current estimate comes from the Pew Research Center's 2023 American Trends Panel survey of 8,480 U.S. adults, which found that 32% of Americans have at least one tattoo, including 22% with more than one (Pew Research Center, 2023). Prevalence is markedly age-graded: 41% of adults under 30 have at least one tattoo, compared with 46% of those aged 30–49, 25% of those aged 50–64 and 13% of those 65 and older (Pew Research Center, 2023). The generational pattern is therefore curvilinear rather than strictly declining with youth, a nuance any Generation Z-specific motivational model must accommodate rather than assume away.

Gender and demographic gradients. Women are considerably more likely than men to be tattooed (38% versus 27%), a gap that is most pronounced among the youngest adults: 56% of women aged 18–29 report having a tattoo, compared with a substantially lower figure among same-aged men (Pew Research Center, 2023). Tattoo prevalence also varies by race/ethnicity (39% of Black Americans, 35% of Hispanic Americans, 32% of White Americans and 14% of Asian Americans), income (inversely related to prevalence) and education (inversely related to prevalence) (Pew Research Center, 2023).

Stated motivations. In the same survey, self-reported reasons for tattooing differed meaningfully by demographic group: women were ten percentage points more likely than men to cite remembering or honouring someone or something (73% versus 63%), while Black respondents were more likely than Hispanic or White respondents to describe their tattoo as “making a statement about what I believe” (56% versus 46% and 44%, respectively) (Pew Research Center, 2023). These self-reported categories map onto the Relational–Affiliative and Sacred/Identity-expressive profiles proposed later in this article, lending preliminary population-level plausibility to the taxonomy rather than constituting a formal test of it.

International variation. Cross-national survey data collected across France, Italy, Germany, the United States and the United Kingdom show substantial variation in both prevalence and stated motivation, reinforcing that cultural context moderates the expression — though not necessarily the underlying psychological architecture — of tattoo motivation (Kluger, Seit , & Taieb, 2019).

Qualitative corroboration of identity motives. Naude and Naud  (2024), using thematic narrative analysis of tattooed university students, found that tattoos functioned simultaneously as expressions of agency/individuality and as markers of communion, affiliation and intimacy — an empirical pattern consistent with the co-occurrence, rather than mutual exclusivity, of the Identity–Autonomous and Relational–Affiliative profiles proposed in Sections 4–7 below.

Market context. Independent of individual motivation, the tattoo services market has continued to expand commercially in most Western economies over the past decade, consistent with the broader normalization trend documented in successive Pew and Ipsos survey waves between 2012 and 2023. This growth trend is reported here descriptively, as market-size figures reflect commercial activity rather than psychological motivation and should not be conflated with the latter.

These figures should be read as boundary conditions for the theoretical model, not as a test of it: prevalence and stated single-item motivations establish that the phenomenon is large, demographically patterned and multiply motivated, which is precisely the empirical situation the four-profile taxonomy developed below is designed to explain at a finer psychological grain than single-item survey questions can achieve.

3. RESEARCH GAP

Although prior scholarship has identified several determinants of tattoo motivation, important conceptual and methodological gaps remain.

Gap 1: Fragmentation of motivational explanations. Existing studies examine uniqueness, appearance, religion, personality, sensation seeking, identity and social behaviour separately. The field lacks an integrated model explaining how these motivational systems interact.

Gap 2: Lack of a Generation Z-specific taxonomy. Most foundational tattoo studies were conducted before the emergence of contemporary platform-mediated identity formation. Research has established increasing international prevalence and diverse motivations, but systematic work specifically integrating Generation Z developmental, social and digital characteristics remains limited. International survey research has demonstrated substantial cross-national variation in tattoo prevalence and motivations, reinforcing the importance of examining cultural and demographic heterogeneity (Kluger et al., 2019).

Gap 3: Insufficient integration of neuroscience. The tattoo literature is predominantly psychological, sociological, dermatological and anthropological. Neuroscience provides relevant evidence regarding reward sensitivity, self-reference and social influence, but these findings have rarely been integrated into a tattoo-specific decision architecture.

Gap 4: Absence of motivational profiles. Most studies ask respondents to rate individual motivations, an approach that assumes motivations operate independently. A person may simultaneously tattoo because of love, identity, faith and peer influence. The more appropriate statistical question is therefore: do empirically distinguishable motivational profiles exist?

Gap 5: Lack of distinction between intrinsic and socially acquired meaning. A tattoo may be deeply self-generated — an individual's private symbol of personal transformation — or substantially socially constructed, such as adoption of a style because it has become normative among peers. These mechanisms should not be treated as equivalent.

4. THEORETICAL FOUNDATION

The proposed framework integrates six theoretical domains.

4.1 Self-determination theory

Self-determination theory distinguishes autonomous motivation from controlled motivation and emphasizes autonomy, competence and relatedness. This distinction is particularly useful for tattoo research because two visually identical tattoos may emerge from completely different motivational processes. An individual may select a tattoo because it expresses an internally endorsed identity, represents a valued relationship, communicates belonging, provides social approval, or conforms to a peer norm — the behavioural outcome is identical while the underlying motivational architecture differs.

4.2 Identity theory and self-concept

Identity formation is especially relevant to late adolescence and emerging adulthood. Developmental neuroscience suggests that adolescent decision-making is not adequately explained by reward sensitivity alone; self- and identity-related value also contributes to motivated choice. A value-based developmental perspective proposes that the ventromedial prefrontal cortex contributes to integrating self-related and action-related value during adolescence. Self-referential processing also involves medial prefrontal systems: research demonstrates that the medial prefrontal cortex is involved in self-referential processing and the representation of self-importance. Consequently, a tattoo may be conceptualised as a **materialized self-schema**: an abstract representation of “who I am” becomes physically encoded into the body.

4.3 Need-for-uniqueness theory

Need for uniqueness provides one of the strongest established psychological explanations of tattooing. Tiggemann and Golder found higher need for uniqueness among tattooed individuals, while subsequent research demonstrated multidimensional relationships between uniqueness motivation and body modification (Weiler et al., 2021). This supports the proposed Identity–Autonomous Inscription profile, whose underlying psychological proposition is:

“This mark distinguishes who I am.” The tattoo therefore functions as a boundary between the individual's perceived self and the social environment.

5. PROPOSED FOUR-PROFILE TAXONOMY

The principal contribution of the present study is a proposed motivational classification framework, outlined in Table 1.

5.1 Profile I: Relational–Affiliative Inscription

Core motive: “**This person or relationship is part of me.**”

This category incorporates romantic love, affection, friendship, family, remembrance, attachment, memorialisation and relational commitment. The tattoo serves as an externalised representation of an internal social bond.

Psychological mechanism: Attachment → emotional salience → autobiographical meaning → permanence preference → bodily inscription. The tattoo becomes a form of **relational memory externalisation**.

Predicted characteristics (high): attachment orientation; relational identity; emotional intensity; autobiographical memory; perceived relationship centrality. Possible examples include names, initials, dates, handwriting, portraits, shared symbols and memorial representations. Consistent with this profile, Pew Research Center (2023) data show that “remembering or honouring someone or something” is among the most frequently cited tattoo motivations, particularly among women.

5.2 Profile II: Sacred–Transcendent Inscription

Core motive: “**This belief is part of who I am.**”

This category incorporates religious faith, spirituality, sacred symbols, divine protection, existential meaning, religious commitment and spiritual transformation. Religious tattoo research demonstrates that tattoos can perform religious and spiritual functions rather than merely decorative ones (Koch & Roberts, 2012). The important theoretical distinction is that sacred tattoos may transform an invisible belief into a visible and enduring bodily representation.

Psychological mechanism: Transcendent belief → existential meaning → identity integration → symbolic representation → permanence.

Predicted characteristics (high): intrinsic religiosity/spirituality; meaning in life; symbolic thinking; identity commitment; existential orientation.

5.3 Profile III: Identity–Autonomous Inscription

Core motive: “**This represents me.**”

This profile concerns individuality, self-expression, uniqueness, personal transformation, autonomy, aesthetic identity and resistance to conventional identity expectations — strongly supported by the established tattoo/uniqueness literature. The tattoo becomes a form of **permanent self-signalling**.

Psychological mechanism: Self-schema → identity discrepancy → desired identity → symbolic selection → bodily permanence.

Predicted characteristics (high): need for uniqueness; autonomous motivation; self-expression; identity clarity; distinctive appearance investment. Swami’s prospective work is particularly relevant: individuals who subsequently obtained tattoos showed higher sensation seeking, need for uniqueness and distinctive appearance investment. Naude and Naudé’s (2024) qualitative findings that tattooed participants described tattoos as expressions of agency and individuality provide corroborating narrative evidence for this profile.

5.4 Profile IV: Social–Normative/Status Inscription

Core motive: “**This connects me to my social world.**”

This category includes peer influence, social conformity, trend adoption, celebrity influence, group membership, subcultural identity, status signalling and social-media visibility. This is not necessarily “negative peer pressure”; social influence can operate through belonging, admiration, norm perception and anticipated social rewards. Developmental neuroscience is highly relevant here: experimental research has demonstrated that peer observation can increase reward-related ventral striatal activation among adolescents, and that individual differences in ventral-striatal sensitivity moderate susceptibility to peer norms.

Psychological mechanism: Social exposure → norm perception → anticipated social evaluation → reward valuation → behavioural intention → tattoo acquisition.

Predicted characteristics (high): perceived peer norms; social comparison; social-media exposure; susceptibility to social influence; social reward sensitivity; status motivation.

Table 1. Summary of the Proposed Four-Profile Taxonomy

Profile	Core motive	Primary mechanism	High on
Relational– Affiliative	“This relationship is part of me”	Attachment → autobiographical meaning → permanence	Attachment orientation, relational identity
Sacred– Transcendent	“This belief is part of me”	Transcendent belief → existential meaning → symbol	Intrinsic religiosity, meaning in life
Identity– Autonomous	“This represents me”	Self-schema → identity discrepancy → signalling	Need for uniqueness, autonomous motivation
Social– Normative/Status	“This connects me to my social world”	Social exposure → norm perception → reward valuation	Peer-norm sensitivity, social-media exposure

6. CROSS-CUTTING MECHANISM: EXPERIENTIAL–AFFECTIVE INSCRIPTION

This mechanism should not be treated as a fifth mutually exclusive class but modelled as a **cross-cutting mechanism** operating across the four profiles. It includes sensation seeking, emotional catharsis, transformation, body reclamation, coping, pain tolerance, aesthetic pleasure and emotional expression. This distinction matters because an individual can obtain a memorial tattoo for relational reasons while simultaneously experiencing emotional regulation through the tattooing process itself. Recent psychological research has begun to show that tattoo functions can be associated with different body representations and self-esteem profiles, reinforcing the proposition that tattooing should not be treated as a psychologically homogeneous behaviour.

7. THE PROPOSED NEUROCOGNITIVE BODY-INSCRIPTION MODEL (NBIM)

The principal theoretical contribution can be represented as the following sequence:

External/Internal Cue → Meaning Attribution → Identity Relevance → Emotional/Social Valuation → Anticipated Reward or Relief → Cost–Permanence Evaluation → Behavioural Intention → Tattoo Acquisition → Social Feedback + Memory Consolidation → Identity Reinforcement

This is not proposed as a literal biological algorithm but as a **neurocognitive decision architecture** derived from established findings in decision neuroscience, social cognition and identity research.

7.1 Stage 1: Cue detection

The initiating cue may be a loved person, religious experience, personal achievement, traumatic or transformative event, peer tattoo, social-media exposure, or aesthetic stimulus. The cue acquires significance through salience and personal relevance.

7.2 Stage 2: Meaning construction

The individual asks, implicitly, “What does this mean to me?” This is where the same tattoo design may acquire completely different psychological meanings across individuals.

7.3 Stage 3: Self-referential valuation

Self-related information engages medial prefrontal systems, which are important for self-referential cognition. The representation therefore shifts from “I like this image” to “This image represents me” — a transition that is theoretically crucial.

7.4 Stage 4: Social valuation

For socially influenced tattoos, the individual additionally evaluates anticipated peer reaction, belonging, visibility and normativity within the reference group. Research on adolescent social influence indicates involvement of mentalising, reward and cognitive-control systems.

7.5 Stage 5: Reward valuation

The individual estimates anticipated utility as expected psychological/social benefit minus expected physical/social/economic cost. Anticipated benefits may include identity coherence, emotional relief, belonging, uniqueness, admiration, symbolic permanence and spiritual reassurance; costs may include pain, financial expenditure, permanence, family disapproval, occupational consequences and future regret. This provides a behavioural-decision framework rather than an unsupported claim that a single neurotransmitter “causes” tattooing.

8. WHY PAIN DOES NOT NECESSARILY PREVENT TATTOOING

Tattooing is unusual because the individual voluntarily accepts physical discomfort to obtain a psychologically valued outcome, raising the question of why anticipated psychological utility sometimes outweighs anticipated physical cost. The answer may involve subjective value transformation: the decision is not “pain versus no pain” but “meaningful future state versus temporary physical cost.” Social and physical pain are also not psychologically independent phenomena; research on social pain suggests partially overlapping neurobiological substrates between physical pain and social disconnection. This opens an important possibility for future experimental research: the subjective value of a tattoo may be influenced by whether the individual perceives it as reducing an identity discrepancy, preserving attachment or increasing social belonging.

9. RESEARCH QUESTIONS

RQ1. Do distinct psychological profiles of tattoo motivation exist among Generation Z?

RQ2. Can Generation Z tattoo motivations be statistically classified into relational-affiliative, sacred-transcendent, identity-autonomous and social-normative profiles?

RQ3. How do identity, attachment, religiosity, uniqueness, social influence and reward sensitivity predict membership in these profiles?

RQ4. Does social-media exposure strengthen the relationship between peer norms and tattoo intention?

RQ5. Does identity centrality mediate the relationship between personal meaning and tattoo intention?

RQ6. Does anticipated emotional/social reward mediate the relationship between motivational profile and tattoo intention?

RQ7. Do individuals with different motivational profiles differ in tattoo permanence preference, regret anticipation and willingness to accept physical discomfort?

10. HYPOTHESES

H1. Need for uniqueness will positively predict Identity–Autonomous Inscription.

H2. Attachment and relational identity will positively predict Relational–Affiliative Inscription.

H3. Intrinsic religiosity/spirituality and meaning in life will positively predict Sacred–Transcendent Inscription.

H4. Perceived peer norms and social-media exposure will positively predict Social–Normative/Status Inscription.

H5. Social reward sensitivity will strengthen the relationship between peer norms and tattoo intention.

H6. Identity centrality will mediate the relationship between personal meaning and tattoo intention.

H7. Anticipated emotional/social reward will mediate the relationship between motivational profile and tattoo intention.

H8. Need for uniqueness will negatively relate to conformity-based tattoo motivation but positively relate to identity-autonomous tattoo motivation.

H9. The four motivational profiles will demonstrate statistically distinguishable latent characteristics rather than representing a single continuous tattoo-motivation factor.

H10. Experiential–Affective motivation will operate as a cross-cutting mechanism associated with more than one primary motivational profile.

H11. Perceived permanence will strengthen the association between identity centrality and tattoo intention.

H12. Social-media-mediated norm exposure will have a stronger association with Social–Normative/Status Inscription than with Sacred–Transcendent Inscription.

11. PROPOSED CONCEPTUAL MODEL

Antecedent variables: attachment; religiosity/spirituality; need for uniqueness; identity clarity; social-media exposure; perceived peer norms; social reward sensitivity; sensation seeking.

Psychological appraisal: personal meaning; identity centrality; emotional salience; social valuation; anticipated reward; anticipated regret.

Four latent motivational profiles: Relational–Affiliative; Sacred–Transcendent; Identity–Autonomous; Social–Normative/Status.

Behavioural outcomes: tattoo intention; number of tattoos; permanence preference; visibility preference; willingness to tolerate pain; expenditure intention; likelihood of repeat tattooing; anticipated regret.

12. RECOMMENDED METHODOLOGY

A Scopus/Web-of-Science-level empirical article should not rely exclusively on a simple questionnaire. A **sequential mixed-method design** would be considerably stronger.

12.1 Phase I: Qualitative exploration

Conduct approximately 30–40 semi-structured interviews with Generation Z participants aged approximately 18–28 years, addressing: (1) why the specific tattoo was chosen; (2) what it represents; (3) whether it would still be wanted if invisible to others; (4) whether it would have been obtained without peer input; (5) whether another person influenced the design; (6) whether it represents a relationship; (7) whether it represents faith or spirituality; (8) whether it represents who the participant is; (9) whether social media influenced the decision; and (10) what emotional outcome was anticipated. The qualitative stage is important because researchers should not impose the four categories before allowing participants to describe their own meanings.

12.2 Phase II: Scale development

Items should be generated from existing literature, qualitative interviews, expert review and pilot testing. Illustrative items include:

Relational–Affiliative: “My tattoo represents someone important to me”; “My tattoo preserves an important relationship”; “My tattoo reminds me of someone I love.”

Sacred–Transcendent: “My tattoo expresses an important spiritual belief”; “My tattoo represents my faith”; “My tattoo provides a permanent reminder of my spiritual values.”

Identity–Autonomous: “My tattoo represents who I am”; “My tattoo distinguishes me from others”; “I wanted something that reflected my individuality.”

Social–Normative: “People around me influenced my decision”; “Seeing tattoos on people I admire influenced me”; “Social-media trends affected my tattoo decision.”

Experiential–Affective: “Getting the tattoo represented an important emotional transition”; “The tattoo helped me express an emotion”; “The experience of getting tattooed itself was meaningful.”

A seven-point Likert scale is recommended for all items.

12.3 Phase III: Psychometric validation

A recommended sample of **N = 600–800** Generation Z respondents would allow exploratory factor analysis, confirmatory factor analysis, measurement invariance testing, latent profile analysis and structural equation modelling. The sample should include tattooed participants, individuals intending to obtain a tattoo, and individuals who reject tattooing; this third group is essential, since its omission would reduce the study to an analysis of tattooed individuals rather than of tattoo decision-making generally.

13. STATISTICAL STRATEGY

13.1 Exploratory factor analysis

Recommended criteria: Kaiser–Meyer–Olkin (KMO) measure; Bartlett’s test of sphericity; parallel analysis; oblique rotation; factor-loading and cross-loading examination.

13.2 Confirmatory factor analysis

Compare a single-factor model, a four-factor model, and a four-factor-plus-cross-cutting-experiential model, reporting CFI, TLI, RMSEA, SRMR, AIC/BIC and χ^2/df . The four-profile model should not simply be declared superior; it must demonstrate empirical superiority against these fit indices.

13.3 Latent profile analysis

Rather than asserting that four types of tattooed Generation Z individuals exist, the analysis should statistically test whether the observed population separates into distinct motivational profiles. Two-, three-, four- and five-class solutions should be compared using AIC, BIC, adjusted BIC, entropy, likelihood-ratio tests and theoretical interpretability; a four-class solution should be accepted only if the statistical evidence supports it.

13.4 Structural equation model

The final model can test the paths Attachment → Relational Motivation → Tattoo Intention; Religiosity → Sacred Motivation → Tattoo Intention; Need for Uniqueness → Identity Motivation → Tattoo Intention; and Peer Norms → Social Motivation → Tattoo Intention, with Social-media Exposure × Peer Norms → Social Motivation modelled as a moderation pathway.

13.5 Multi-group analysis

The model should subsequently be compared across gender, tattooed/non-tattooed status, first-time/repeat tattoo seekers, high/low social-media exposure, high/low religiosity, and across national or cultural samples where available, with measurement invariance established before latent means are compared across groups.

14. NEUROSCIENTIFIC EXTENSION

For an interdisciplinary extension, a subsample of approximately 80–120 participants could undertake an experimental neurocognitive study presenting personally meaningful tattoo designs, peer-endorsed designs, religious/spiritual symbols, romantic/relational symbols, neutral designs, individualistic designs and popular social-media tattoo styles, with participants rating attractiveness, identity relevance, emotional intensity, social desirability, willingness to obtain, perceived permanence and anticipated regret. Where neuroimaging resources are available, fMRI could examine activity associated with self-reference, social valuation and reward-related processing.

The paper must, however, avoid reverse inference: it should not assert that the relational profile “uses” a specific structure such as the amygdala, that the faith profile “uses” the hippocampus, or that the peer-influence profile “uses” dopamine as a singular causal mechanism. The defensible formulation is that the proposed psychological profiles are expected to recruit **distributed neural systems** involved in self-reference, social cognition, reward valuation, affective salience and decision-making, with empirical neuroimaging required to test the prediction.

Table 2. Proposed Neurocognitive Hypothesis Matrix

Psychological process	Expected construct	Relevant neural literature	Proposed role
Self-reference	Identity centrality	Medial prefrontal cortex	“This represents me”
Value integration	Subjective utility	Ventromedial prefrontal cortex	“This is worth doing”
Reward anticipation	Social/affective reward	Ventral striatum	“This will feel/reward me”
Social cognition	Peer evaluation	Medial prefrontal cortex / temporoparietal junction	“What will others think?”
Cognitive control	Cost evaluation	Lateral prefrontal cortex	“Should I actually do it?”
Salience	Emotional significance	Insula / anterior cingulate systems	“This matters to me”
Memory	Autobiographical meaning	Medial temporal / default-mode systems	“This preserves an event or person”

This should be read as a **hypothesis matrix** for future testing, not as evidence that tattoos activate these regions specifically.

15. THEORETICAL PROPOSITION: THE BODY INSCRIPTION VALUE PROPOSITION

The central theoretical proposition of the article is that tattoo intention emerges when the anticipated identity, relational, sacred or social value of permanent bodily inscription exceeds the individual’s perceived physical, financial, interpersonal and future-regret costs. Formally:

$$TI = f[(IV + RV + SV + SoV + ER) - (PC + FC + IC + RC)]$$

where TI = tattoo intention; IV = identity value; RV = relational value; SV = sacred value; SoV = social value; ER = anticipated emotional reward; PC = perceived physical cost; FC = financial cost; IC = interpersonal cost; RC = anticipated regret cost. The equation is conceptual and heuristic rather than a claim of a literal neural computation, and is intended to guide operationalisation in the structural model rather than to be estimated as written.

16. NOVEL CONSTRUCT I: MEANING DENSITY OF BODY INSCRIPTION (MDBI)

A potentially novel construct emerging from the framework is the Meaning Density of Body Inscription — the amount of psychological meaning an individual associates with a single bodily symbol. A small tattoo may carry extremely high psychological meaning density: for example, a two-centimetre symbol encoding one person, a decade-long relationship, religious meaning and personal transformation may produce greater subjective value than a much larger, purely aesthetic tattoo. This yields a measurable construct:

$$MDBI = (\text{Identity} + \text{Emotional} + \text{Relational} + \text{Symbolic Meaning}) / \text{Physical Size}$$

The denominator is conceptual rather than literally square centimetres; a psychometric version could instead assess the number and intensity of meanings attached to each tattoo. This may be one of the more original constructs proposed in the study.

17. NOVEL CONSTRUCT II: PERMANENCE–IDENTITY CONGRUENCE (PIC)

A second proposed construct is Permanence–Identity Congruence: individuals should be more willing to accept permanent bodily modification when they perceive the represented identity as stable and central to the self, such that identity centrality multiplied by identity stability predicts permanence acceptance. This can explain why two people exposed to the same tattoo trend respond differently — one treating it as fashionable and transient, the other as representing a decade-stable aspect of self — with the latter predicted to show greater permanence acceptance.

18. EXPECTED CONTRIBUTIONS

Theoretical contribution. The study integrates body modification research, identity theory, social influence, developmental neuroscience, reward-related decision-making, attachment, lived religion and consumer psychology.

Methodological contribution. The combined use of qualitative interviews, psychometric scale development, confirmatory factor analysis, latent profile analysis, structural equation modelling, multi-group analysis and optional neuroimaging validation moves the field beyond descriptive surveys.

Empirical contribution. The study would determine whether the proposed four motivational profiles actually exist as statistically distinguishable classes.

Practical contribution. Findings could inform youth behavioural research, body-image interventions, social-media influence research, consumer behaviour, tattoo-industry marketing, counselling and informed decision-making, and cultural and religious studies.

19. ETHICAL POSITION

The paper explicitly avoids pathologising tattooed individuals. Previous research indicates that tattooed young adults are not necessarily psychologically abnormal; tattooing may occur within normal psychological functioning and may represent ordinary forms of identity and intrinsic motivation. Accordingly, tattooing is not treated as equivalent to psychopathology, peer influence is not treated as equivalent to irrationality, religious tattooing is not treated as equivalent to extremism, and multiple tattoos are not treated as indicative of psychological disorder. The study examines decision mechanisms, not mental illness.

20. LIMITATIONS

Several limitations should be acknowledged. First, Generation Z is not psychologically homogeneous; age, culture, socioeconomic status, religion, gender, occupation and local tattoo norms may substantially modify motivations. Second, neurobiological mechanisms cannot be inferred from self-report alone. Third, cross-sectional data cannot establish causal direction. Fourth, social-media exposure may be correlated with, rather than causally responsible for, tattoo adoption. Fifth, latent classes are statistical approximations rather than fixed psychological “types.” Sixth, and most importantly for publication credibility, the proposed four-profile taxonomy must be treated as a hypothesis requiring empirical validation rather than as an established finding.

Tattoos are a powerful form of self-expression, each design telling a unique story. Below are five distinct styles with their descriptions.



1 MINIMALIST TATTOO

Minimalist tattoos use clean lines and simple forms to create subtle yet meaningful designs. They often represent personal milestones or beliefs in a refined and understated way.



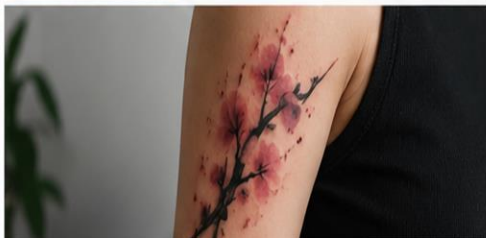
2 MANDALA TATTOO

Rooted in spiritual traditions, mandala tattoos symbolize balance, unity, and wholeness. These circular patterns are often chosen for their calming energy and deep symbolic meaning.



3 REALISM TATTOO

Realism tattoos aim to capture lifelike detail and depth, often portraying portraits, animals, or nature. This style requires high skill and is admired for its photographic precision.



4 WATERCOLOR TATTOO

Watercolor tattoos mimic the look of brushstrokes and paint splashes. With vibrant colors and a free-flowing appearance, they evoke creativity and emotional expression.



5 GEOMETRIC TATTOO

Geometric tattoos use shapes, symmetry, and patterns to create visually striking designs. They often represent harmony, structure, and the interconnectedness of life.

21. CONCLUSION

Tattooing provides a unique behavioural window into the conversion of abstract psychological meaning into permanent bodily action. The existing literature demonstrates that tattooing can express uniqueness, identity, appearance, emotional meaning and religious commitment, while developmental neuroscience demonstrates that self-related valuation, reward processing and social influence are important components of decision-making during adolescence and emerging adulthood. Current population data corroborate the practical scale of the phenomenon: roughly one in three U.S. adults, and a still higher proportion of young women, now carry at least one tattoo (Pew Research Center, 2023).

The present framework proposes that Generation Z tattoo decisions can be investigated through four potentially distinguishable motivational architectures: **Relational–Affiliative Inscription** (“This person/relationship is part of me”); **Sacred–Transcendent Inscription** (“This belief is part of me”); **Identity–Autonomous Inscription** (“This represents who I am”); and **Social–Normative/Status Inscription** (“This connects me to my social world”), with experiential and affective processes operating across these categories rather than constituting an independent class.

The central scientific question is therefore not whether Generation Z “likes tattoos,” but whether different psychological systems produce qualitatively different pathways toward the same behavioural outcome: permanent bodily inscription. If empirical testing confirms the proposed latent profiles, tattooing could become an important model for understanding how identity, relationships, spirituality, social influence and reward valuation converge in contemporary young-adult decision-making — a physical externalisation of an internally valued psychological representation.

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