

Effect of the Song "Diri" by Tulus on Self-Affirmation Among University Students: An Experimental Study

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Article History

Received on 4 Juli 2025

1st Revision on 18 Juli 2025

2nd Revision on 2 Agustus 2025

3rd Revision on 16 Agustus 2025

Accepted on 4 September 2025

Abstract

Purpose: University students are highly vulnerable to psychological distress. Self-affirmation, defined as reflecting on core personal values to maintain self-integrity under threat, may serve as a protective mechanism. This study examines the effect of listening to the Indonesian song "Diri" by Tulus on self-affirmation among psychology students at Universitas Padjadjaran (UNPAD).

Methodology: A true experimental pretest posttest design was used with 78 psychology students (cohorts 2022–2023) selected via stratified random sampling using UNPAD SAS. Self-affirmation was measured using the SSAM. The song was delivered via Spotify through Zoom. Normality was tested using Kolmogorov–Smirnov; due to non-normal data, the Wilcoxon Signed Rank Test was applied in SPSS 22. Effect size was calculated using $r = |Z|/\sqrt{N}$.

Results: Mean SSAM scores increased from 5.14 (SD = 0.73) to 5.54 (SD = 0.75), a 7.8% improvement. The Wilcoxon test showed a significant difference ($Z = -6.355$, $p < .001$) with a large effect size ($r = 0.719$).

Conclusion: Listening to "Diri" significantly enhances self-affirmation, indicating that music with affirming lyrical content may function as an accessible psychological intervention.

Limitations: The study lacks a control group, uses a single university sample, and has limited ecological validity due to online administration.

Contribution: This is the first experimental evidence that an Indonesian popular song can function as a self-affirmation stimulus, contributing to music psychology and low cost mental health interventions in higher education.

Keywords: *Experimental Study, Psychological Well-being, Self-affirmation, Song "Diri" Tulus, University Students*

How to Cite: Wardhani, N., Tamawulan, D. R., Sari, A. R. P., Mardhiyah, N. A., Nuraini, R. K., Safitri, N. C., & Sulistya, D. M. R. (2025). Effect of the Song "Diri" by Tulus on Self-Affirmation Among University Students: An Experimental Study. *Kajian Psikologi dan Kesehatan Mental*, 3(2), 1-13.

1. Introduction

University students represent one of the most psychologically vulnerable demographic groups in contemporary society. [Callender and Cole \(2016\)](#) identify young adult students as among the age groups most susceptible to mental health disorders, and [Stallman \(2010\)](#) documented that university students experience significantly higher levels of psychological distress compared to age-matched

peers in the general population. The academic demands of higher education including pressure for high academic performance ([Talib & Zia-Ur-Rehman, 2012](#)), and the concurrent necessity of adapting to academic, social, and environmental changes ([Chacón-Cuberos, Zurita-Ortega, Olmedo-Moreno, & Castro-Sánchez, 2019](#)) generate a distinctive psychosocial stress profile. [Horton \(2015\)](#) documented that academic pressures produce specific psychological consequences including fear of failure, behavioral avoidance, low self-efficacy, learned helplessness, procrastination, and irresponsibility, collectively undermining psychological well-being ([Dwyer & Cummings, 2001](#)) and academic success.

Self-affirmation theory, developed by [Steele \(1988\)](#) and elaborated by [Sherman and Cohen \(2006\)](#) and [Cohen and Sherman \(2014\)](#), offers a well-validated theoretical account of how individuals cope with the threats to self-integrity that characterize high demand academic environments. The theory posits that humans are fundamentally motivated to maintain a sense of global self-integrity a perception of oneself as a moral, adaptive, and capable person. When this self-perception is threatened by failure, criticism, or inadequacy, individuals experience a self-threat response that can generate defensive cognitions and avoidant behaviors. Self-affirmation the process of affirming core personal values or positive qualities resolves this threat by restoring the sense of global adequacy without requiring direct engagement with the threatening information ([Sherman, 2013](#); [Cohen & Sherman, 2014](#)). Critically, self-affirmation does not require addressing the specific threat; rather, it functions by broadening the individual's perspective on their overall value, reducing the psychological significance of any single domain of threat.

Song lyrics represent an understudied but theoretically compelling self-affirmation stimulus. [Cohen and Sherman \(2014\)](#) identify multiple formats through which self-affirmation can be triggered, including values reflection exercises, writing tasks, and exposure to affirming messages. Song lyrics deliver affirming messages through a particularly engaging medium that combines semantic content (the words), emotional arousal (the music), and narrative identification (the personal meaning listeners assign to lyrical content). Music is ubiquitous in contemporary daily life: [Nurhayati-Wolff \(2023\)](#) reported that Indonesian adults average 97 minutes of daily music streaming, making song listening one of the most accessible and naturalistic psychological exposures available for population-level well-being intervention.

The song "Diri" (meaning "Self") from the album *Manusa* by Indonesian singer-songwriter Tulus has become one of the most widely circulated Indonesian popular songs in recent years, accumulating 109.8 million Spotify plays by October 2023. Tulus designed "Diri" as a narrative of self-discovery and self-value recognition ([Nurfauziyah & Alipya, 2022](#)). Semiotic analyses of its lyrics confirm that the song conveys messages of self-acceptance, self-compassion, and the intrinsic worth of the individual content that maps directly onto the mechanisms of self-affirmation theory ([Kurnia & Sobur, 2023](#); [Hadjar & Sholikhati, 2023](#)). Specific lyrical affirmations such as "*Bisikkanlah, terima kasih pada diri sendiri, hebat dia, terus menjagamu dan sayangimu*" ("Whisper, thank you to yourself, how wonderful you are, always protecting and loving yourself") and "*Kau terlalu berharga untuk luka*" ("You are too valuable to be hurt") exemplify the self-affirming message structure that [Sherman and Cohen \(2006\)](#) identify as characteristic of effective self-affirmation stimuli.

Despite the theoretical alignment between "Diri" 's lyrical content and self-affirmation theory, no experimental study has tested whether listening to this song produces a measurable increase in self-affirmation. Prior research has examined music effects on the related construct of self-esteem, with contradictory findings: [Elvers et al. \(2017\)](#) found that empowering music listening significantly increased momentary explicit self-esteem, while [Hajar et al. \(2019\)](#) found no significant effect in an Indonesian student sample. The distinction between self-esteem (a global evaluation of self-worth) and self-affirmation (the process of reactivating core value beliefs under threat) has not been examined in music psychology research, representing a theoretically important gap. Moreover, no study has investigated the psychological effects of a specific Indonesian popular song with explicit self-affirming lyrical content.

This study addresses these gaps by conducting a pretest-posttest experiment to test whether listening to "Diri" by Tulus produces a significant increase in self-affirmation scores on the Spontaneous Self-Affirmation Measure (SSAM; [Harris et al., 2019](#)) among undergraduate psychology students at Universitas Padjadjaran. The study hypothesizes are: (H₀) Listening to the song "Diri" by Tulus significantly increases self-affirmation among students of Universitas Padjadjaran cohorts 2022–2023; (H₁) Listening to the song "Diri" by Tulus does not significantly increase self-affirmation among these students.

2. Literature Review and Hypotheses Development

2.1 Self-Affirmation Theory

Self-affirmation theory ([Steele, 1988](#); [Sherman, & Cohen, 2006](#)) proposes that human beings possess a fundamental motivational system oriented toward maintaining a sense of global self-integrity: a subjective perception of oneself as an adequate, moral, and capable person. When this sense of integrity is threatened by failure, social rejection, negative feedback, or information contradicting one's self-concept the self-system responds defensively, generating biased information processing, avoidance behaviors, and heightened emotional reactivity that collectively impair adaptive functioning. Self-affirmation provides an alternative route to restoring integrity that does not require directly engaging with or resolving the specific threat. By reflecting on an important personal value (such as creativity, relationships, or spirituality) or engaging with affirmation of one's positive qualities, individuals can re-establish a sense of overall adequacy that renders the specific threat less psychologically significant ([Sherman, 2013](#); [Cohen, & Sherman, 2014](#)). The mechanism operates because self-integrity is domain-general: a sense of overall adequacy in one valued domain compensates for perceived inadequacy in another, reducing the motivational urgency of defensive responding.

Research on self-affirmation has documented its effectiveness in reducing defensive information processing ([Cohen & Sherman, 2014](#)), improving academic performance in stigmatized groups ([Walton & Cohen, 2011](#)), reducing health-risk behaviors ([Sherman, Nelson, & Steele, 2000](#)), and supporting psychological resilience under chronic stress ([Sherman, 2013](#)). In the university student context specifically, self-affirmation interventions have been shown to buffer the academic performance and mental health effects of social identity threat and stereotype threat ([Cohen, Garcia, Apfel, & Master, 2006](#)). The Spontaneous Self-Affirmation Measure [Harris, Griffin, Napper, Bond, Schütz, Stride, and Brearley \(2019\)](#) operationalizes self-affirmation as a spontaneous, ongoing cognitive tendency to affirm the self when confronting threats or challenges. Unlike laboratory induction procedures, the SSAM captures the degree to which individuals naturally engage in self-affirming cognition in daily life, making it appropriate for measuring the immediate response to an affirmation-relevant stimulus such as song lyrics.

2.2 Music, Song Lyrics, and Self-Affirmation

Music exerts documented effects on emotional states, self-relevant cognition, and psychological well-being through multiple mechanisms. [Juslin and Västfjäll \(2008\)](#) identify emotional contagion, episodic memory, rhythmic entrainment, and aesthetic judgment as pathways through which music modulates affective experience. In the context of self-relevant cognition, music with empowering themes and messages can activate upward social comparisons, prime achievement-related cognition, and trigger identity-affirming associations ([Elvers, Fischinger, & Steffens, 2017](#)).

Song lyrics add a semantic dimension to music's affective effects. Lyrics communicate propositional content specific messages, values, and narratives that can directly activate the cognitive schemas relevant to self-affirmation ([Hadjar & Sholikhati, 2023](#); [Hidayat, 2014](#)). When lyrics explicitly affirm the listener's worth, capability, and value as in "Diri"'s "you are too valuable to be hurt" they function analogously to externally delivered verbal affirmations of the kind documented by [Bambaeroo and Shokrpour \(2017\)](#) to generate feelings of acceptance and positive regard. The unique quality of song lyrics as an affirmation medium is their embedding within a musical context that itself modulates emotional receptivity: listeners who are in a positive emotional state induced by music's melodic,

harmonic, and rhythmic properties may be more receptive to the affirming semantic content of the lyrics.

Prior research on music and self-relevant outcomes has focused primarily on self-esteem. [Elvers et al. \(2017\)](#) found that listening to personally empowering music increased momentary explicit self-esteem among adult participants, while [Hajar et al. \(2019\)](#) found no significant effect on self-esteem in an Indonesian student sample. These contradictory findings may reflect differences in the cultural relevance of the stimulus music, the ecological validity of the experimental context, and the distinction between self-esteem and self-affirmation as distinct constructs. Self-affirmation the active reaffirmation of core values in response to threat is theoretically more proximal to lyrical messages about self-worth and personal values than is global self-esteem, suggesting that content-specific song lyrics may be more effective self-affirmation than general self-esteem stimuli.

2.3 The Song "Diri" by Tulus

Tulus is one of Indonesia most acclaimed contemporary singer-songwriters, known for introspective, lyrically rich compositions addressing themes of identity, relationships, and human experience. "Diri" ("Self"), released as part of the album *Manusia*, was designed by Tulus as a narrative about the journey of self-knowledge and the recognition of personal values ([Nurfauziyah & Alipya, 2022](#)). Multiple semiotic analyses of the lyrics confirm that the song conveys messages of self-acceptance, self-compassion, the importance of protecting one's emotional well-being, and the intrinsic value of the individual regardless of external achievement or social approval ([Kurnia & Sobur, 2023](#); [Hadjar & Sholikhati, 2023](#)).

These lyrical themes map directly onto [Sherman and Cohen's \(2006\)](#) characterization of effective self-affirmation content: affirmation of the individual as a "good," "moral," "adaptive," and "worthy" person; motivation to respond to threats through active value engagement rather than passive defensive withdrawal; and maintenance of the positive self-narrative that constitutes the foundation of psychological integrity. The song's extraordinary popularity 109.8 million Spotify plays as of October 2023 suggests strong cultural resonance with Indonesian listeners' self-relevant concerns, further supporting its potential as a naturalistic self-affirmation stimulus.

2.4 Prior Empirical Studies

Table 1 summarizes prior empirical and theoretical studies relevant to the relationship between music, self-affirmation, and related psychological constructs.

Table 1. Summary of Prior Studies on Music, Self-Affirmation, and Self-Relevant Psychological Outcomes

Author(s) & Year	Population / Setting	Method	Key Finding on Music / Song and Psychological Outcomes
Elvers et al. (2017)	General adult participants	Experimental, implicit/explicit measures	Empowering music listening significantly increased momentary explicit self-esteem; implicit self-esteem showed marginal effects; supports music as self-enhancement mechanism
Hajar et al. (2019)	Indonesian students	Quasi-experimental	Music listening did not significantly improve self-esteem; contradicts Elvers et al. findings; suggests cultural and musical context moderate effects
Niman and Surbakti (2022)	Psychiatric nursing patients with low self-esteem, Indonesia	Case study	Positive affirmation therapy significantly improved self-worth and psychological well-being; external affirmation messages can activate self-affirmation processes

Author(s) & Year	Population / Setting	Method	Key Finding on Music / Song and Psychological Outcomes
Cohen and Sherman (2014)	Multi-study review	Theoretical review and meta-analysis	Self-affirmation interventions consistently reduce defensiveness, improve information processing of threatening messages, and enhance psychological resilience; values-reflection most effective format
Sherman (2013)	Multi-study review	Theoretical review	Self-affirmation buffers the stress response and broadens cognitive processing; effective when affirmed value is important and relevant to individual identity
Sherman and Cohen (2006)	Experimental studies, multiple contexts	Theoretical and experimental review	Self-affirmation theory: affirming core values reduces ego-threat response and restores sense of global adequacy; self-affirmation can be triggered by diverse stimuli activating value salience
Harris et al. (2019)	Community adults and students, multiple samples	Scale development, validation	SSAM reliably measures spontaneous self-affirmation as a stable individual difference; validates SSAM as a quantitative instrument with strong psychometric properties
Nurfauziyah and Alipya (2022)	Lyrics analysis	Semiotic content analysis	Song "Diri" by Tulus contains motivational messages of self-acceptance, self-compassion, and self-value recognition; lyrics explicitly reinforce positive self-narrative
Kurnia and Sobur (2023)	Lyrics analysis	Semiotic analysis	Song "Diri" conveys messages about reconciling with oneself, appreciating personal effort, and recognizing core personal values; content aligns with self-affirmation theory

As Table 1 demonstrates, the present study occupies a novel position at the intersection of music psychology and self-affirmation research: prior studies have examined either music effects on self-esteem (not self-affirmation) or the lyrical content of "Diri" through semiotic analysis (not experimental measurement). No prior study has experimentally tested whether a specific Indonesian popular song can function as a self-affirmation stimulus using a validated self-affirmation measure.

2.5 Research Hypothesis

H_0 (Research Hypothesis): Listening to the song "Diri" by Tulus significantly increases self-affirmation (as measured by SSAM scores) among undergraduate psychology students at Universitas Padjadjaran.

H_1 : H_1 (Null Hypothesis): Listening to the song "Diri" by Tulus does not significantly increase self-affirmation among undergraduate psychology students at Universitas Padjadjaran.

3. Research Methodology

3.1 Research Design

A true experimental pretest-posttest single-group design was employed. The design involves measuring the dependent variable (SSAM self-affirmation score) before and after administration of the experimental stimulus (the song "Diri"). While a control group design would provide stronger causal inference by controlling for maturation and testing effects, the single-group pretest-posttest design enables within-subject comparison of self-affirmation before and after the stimulus, directly testing whether exposure to the song produces a measurable change in SSAM scores. This design is appropriate for the study's primary objective of establishing proof-of-concept for the song as a

self-affirmation stimulus, and is consistent with prior music-psychology experimental designs ([Elvers, Fischinger, & Steffens, 2017](#)).

In addition, this design is commonly used in early-stage psychological intervention research when the primary goal is to evaluate preliminary effects before conducting randomized controlled trials. Pretest posttest single group designs remain widely accepted in feasibility and proof of concept studies, particularly in applied psychological research where ecological validity is prioritized ([Harris, Griffin, Napper, Bond, Schüz, Stride, & Brearley, 2019](#); [Leon, Davis, & Kraemer, 2023](#)). Furthermore, within-subject pretest–posttest designs are frequently applied in music psychology because they reduce inter-individual variability in emotional and cognitive responses to auditory stimuli. Recent research indicates that music-based interventions often rely on repeated-measure designs to detect changes in affective and self-referential constructs, including self-related processing and mood regulation ([Bradt, Dileo, & Potvin, 2020](#); [Fancourt, & Finn, 2019](#)).

3.2 Participants

Participants were undergraduate psychology students from the 2022 and 2023 academic cohorts at the Faculty of Psychology, Universitas Padjadjaran, Bandung, Indonesia. Stratified random sampling was conducted using UNPAD Statistical Analysis System (SAS), with cohort year (2022 and 2023) as the stratification variable to ensure proportional representation. The final sample comprised 78 participants: 39 from the 2022 cohort and 39 from the 2023 cohort (Table 2). All participants provided informed consent prior to data collection.

Table 2. Sample Distribution by Academic Cohort

Cohort	n	Percentage (%)
2022 cohort	39	50.0
2023 cohort	39	50.0
Total	78	100.0

Table 2 presents the distribution of participants based on academic cohort. The sample was evenly divided between the 2022 and 2023 cohorts, with 39 students (50.0%) from each group, resulting in a total of 78 participants. This balanced distribution indicates that both cohorts were equally represented in the study, reducing potential bias related to academic year differences. The equal proportion of participants across cohorts also enhances the comparability of responses and supports the internal validity of the experimental design.

3.3 Measurement Instrument

Self-affirmation was measured using the Spontaneous Self-Affirmation Measure (SSAM) developed and validated by [Harris et al. \(2019\)](#). The SSAM is a 13-item instrument assessing the spontaneous tendency to engage in self-affirming cognition when confronting challenges or potential threats. Items assess the frequency with which respondents naturally engage in core-value reflections and self-affirming thoughts. The SSAM was selected because it captures the naturalistic, spontaneous dimension of self-affirmation that is theoretically most proximal to the effect of encountering affirming song lyrics in daily life, as distinct from deliberate laboratory induction procedures. Permission to use the SSAM was obtained from the instrument's developer (P. R. Harris, personal communication). The SSAM has demonstrated strong psychometric properties including adequate internal consistency and convergent validity with self-affirmation theory constructs ([Harris et al., 2019](#)).

3.4 Procedure

Data collection was conducted online via Google Forms (for SSAM administration) and Zoom Meeting (for song delivery). The procedure comprised three sequential stages. In the pretest stage, participants completed the 13-item SSAM via Google Form, providing baseline self-affirmation scores. In the stimulus stage, participants listened to "Diri" by Tulus played in its entirety through Spotify via the Zoom Meeting platform, with audio delivered through participants' own headphones or speakers. In the posttest stage, immediately following the song's conclusion, participants completed

the SSAM a second time via Google Form. Data were collected in a single session. All data were stored and exported from Google Forms for analysis using IBM SPSS Statistics version 22.

To ensure procedural consistency, all participants received identical instructions before the session began. Participants were asked to complete the study in a quiet environment, minimize external distractions, and use the same device throughout the pretest, stimulus, and posttest stages. The use of a standardized online procedure was intended to reduce variations in participants' listening experiences and survey responses. Previous studies have demonstrated that online experimental and survey-based research can provide reliable data when standardized protocols and appropriate quality-control procedures are implemented ([Van, Salem, & Wenzel, 2022](#); [Greene, & Naveh-Benjamin, 2022](#)).

The selection of a single-session pretest–posttest design was based on its suitability for assessing immediate psychological changes following an intervention. Music-based interventions delivered through online platforms have been increasingly utilized in psychological research due to their accessibility and ability to produce short-term emotional and cognitive effects. Furthermore, self-affirmation interventions have been shown to influence individuals' emotional responses and psychological well-being, supporting the use of immediate post-intervention assessment in evaluating changes in self-affirmation levels ([Chen, Nelson, Johnson, & Fleming, 2021](#); [Simpson, Perry, & Thompson, 2021](#)).

3.5 Data Analysis

Descriptive statistics (mean, standard deviation) were computed for pretest and posttest SSAM scores. Normality of the distribution was assessed using the Kolmogorov-Smirnov test. Given the non-normal distribution of pretest data ($p = .030 < .05$), the non-parametric Wilcoxon Signed Rank Test was applied to examine the significance of pretest-posttest differences. The decision criterion was $p < .05$ (two-tailed). Effect size was calculated using the formula $r = |Z|/\sqrt{N}$ ([Cohen, 1988](#)), where r values of .10, .30, and .50 correspond to small, medium, and large effects respectively.

In addition to inferential testing, the direction and magnitude of change were further interpreted in relation to the distributional characteristics of the data. Because non-parametric procedures rely on rank ordering rather than raw scores, median differences between pretest and posttest values were also considered to provide a more robust representation of central tendency under non-normal conditions. This approach helps ensure that conclusions are not disproportionately influenced by potential outliers or skewed score distributions.

To complement the statistical findings, a sensitivity check was also conceptually warranted to evaluate whether the observed significance might be influenced by sample size or tied ranks within the Wilcoxon procedure. Although such checks were not formally reported, acknowledging these limitations is important because Wilcoxon Signed Rank results can be affected when many identical or near-identical scores occur, potentially reducing the precision of the test statistic. Future analyses could strengthen robustness by reporting confidence intervals for the effect size and conducting bootstrapped non-parametric comparisons to validate the stability of the observed effects.

4. Results and Discussions

4.1 Descriptive Statistics

Table 3. Descriptive Statistics: SSAM Scores at Pretest and Posttest (n = 78)

Measurement Point	N	Mean (SSAM)	SD
Pretest (before song)	78	5.14	0.73
Posttest (after song)	78	5.54	0.75
Mean difference (Δ)	—	+0.40 (7.8% increase)	—

Note: SSAM = Spontaneous Self-Affirmation Measure ([Harris, Griffin, Napper, Bond, Schütz, Stride, & Brearley, 2019](#)). Higher scores indicate greater spontaneous self-affirmation.

Table 3 shows that mean SSAM scores increased from 5.14 (SD = 0.73) at pretest to 5.54 (SD = 0.75) at posttest, representing an absolute increase of 0.40 points or a 7.8% relative increase. Table 3 also shows a slight increase in standard deviation from pretest to posttest, indicating that while overall self-affirmation levels improved after the intervention, the degree of individual change varied slightly among participants, suggesting relatively stable but somewhat heterogeneous responses to the stimulus.

4.2 Normality Test

Table 4. Kolmogorov-Smirnov Normality Test Results

Measurement Point	K-S Statistic	p-value	Distribution
Pretest	—	.030	Non-normal
Posttest	—	.200	Normal
Decision	—	—	Non-parametric test required

Table 4 shows that the Kolmogorov–Smirnov test indicated non-normal distribution for the pretest data ($p = .030 < .05$), while the posttest data were normally distributed ($p = .200 > .05$). Table 4 further shows that because one of the paired distributions violates the normality assumption required for a paired-samples t-test, a non-parametric Wilcoxon Signed Rank Test was applied for the pretest–posttest comparison. This choice of analysis is appropriate for mixed normality conditions in paired data and aligns with standard statistical procedures for non-parametric testing (Field, 2018).

4.3 Wilcoxon Signed Rank Test

Table 5. Wilcoxon Signed Rank Test Results: Pretest vs. Posttest SSAM Scores

Test Statistic	Value	p-value	Decision
Z (Wilcoxon Signed Rank)	-6.355	.000	Reject H_0
Effect size $r = Z /\sqrt{N}$	0.719	—	Large effect ($r > .50$)
Interpretation	—	—	Significant pre-post SSAM increase

Note: Effect size $r = |Z|/\sqrt{N} = |-6.355|/\sqrt{78} = 0.719$. Large effect: $r > .50$ (Cohen, 1988). IBM SPSS Statistics v22.

Table 5 shows that the Wilcoxon Signed Rank Test revealed a statistically significant difference between pretest and posttest SSAM scores ($Z = -6.355$, $p = .000 < .05$). Table 5 further shows that the null hypothesis (H_1) is rejected and the research hypothesis (H_0) is supported, indicating that listening to the song “Diri” by Tulus significantly increases self-affirmation scores among participants. In addition, Table 5 shows a large effect size ($r = 0.719$), exceeding Cohen’s threshold for a large effect ($r = .50$), suggesting that the intervention produced not only statistically significant but also practically meaningful improvements in self-affirmation.

4.4 Discussion

4.4.1 Lyrical Content and Self-Affirmation Mechanisms

The significant SSAM score increase following song exposure is theoretically interpretable through Sherman and Cohen’s (2006) self-affirmation framework. “Diri”’s lyrical content operationalizes several of the mechanisms through which self-affirmation restores integrity: it reminds listeners of their intrinsic worth as individuals (“you are too valuable to be hurt”), encourages recognition of personal effort and resilience (“whisper, thank you to yourself, how wonderful you are”), and validates the listener’s positive narrative about themselves as a caring, striving, and worthy person. This lyrical content directly activates the cognitive schemas that Sherman (2013) identifies as the functional basis of self-affirmation: affirmation of the self as “good,” “moral,” “adaptive,” and “deserving of respect.”

Importantly, this activation does not require deliberate reflective effort from the listener: the lyrics deliver affirming messages passively through normal song listening, potentially triggering spontaneous self-affirming cognition of the kind measured by the SSAM. The significant SSAM increase following a single song exposure suggests that the lyrical affirmation was sufficiently salient

and cognitively accessible to produce measurable changes in spontaneous self-affirmation tendency, even in the brief timeframe of a single experimental session.

4.4.2 Music as Self-Affirmation Medium

The study's findings support the theoretical proposition that music with semantically affirming lyrical content can function as a self-affirmation stimulus. This extends prior research on music and self-relevant cognition in two directions. First, it differentiates the construct of self-affirmation from self-esteem, on which prior music research has focused ([Elvers et al., 2017](#); [Hajar et al., 2019](#)): the significant increase in SSAM scores suggests that "Diri"'s effect may specifically target the value-affirmation component of self-relevant cognition rather than global self-evaluation. Second, it establishes the validity of a specific, culturally resonant Indonesian popular song as a self-affirmation stimulus, extending the self-affirmation literature beyond the English-language, Western-cultural contexts in which most prior experimental work has been conducted.

The large effect size ($r = 0.719$) is noteworthy in the context of self-affirmation intervention research. [Cohen and Sherman \(2014\)](#) report that laboratory self-affirmation interventions typically produce moderate to large effects on self-relevant outcomes, and the present findings are consistent with this range. The fact that a naturalistic music-listening stimulus produces effect sizes comparable to explicit laboratory self-affirmation inductions suggests that song listening may constitute a particularly efficient and enjoyable self-affirmation modality one that has already been spontaneously adopted by the millions of listeners who have streamed "Diri" on Spotify.

4.4.3 Implications for University Student Well-Being

The study context university psychology students experiencing the academic and social demands documented by [Stallman \(2010\)](#), [Chacón-Cuberos et al. \(2019\)](#), and [Horton \(2015\)](#) lends particular practical significance to the findings. University environments consistently expose students to threats to self-integrity including academic failure, social comparison, and identity uncertainty. Self-affirmation interventions have been shown to reduce the psychological impact of these threats ([Cohen & Sherman, 2014](#); [Walton & Cohen, 2011](#)), but traditional laboratory-based affirmation inductions require deliberate engagement with structured writing exercises. Song listening offers a low-effort, high-accessibility alternative that students may naturally gravitate toward during stressful periods, suggesting that "Diri" and similar songs could be recommended as self-affirmation support resources in university counseling and well-being programs.

The finding that a widely streamed Indonesian popular song can produce significant self-affirmation effects also has implications for how music industry practitioners, mental health advocates, and public health communicators might leverage popular culture as a vehicle for accessible psychological well-being support. Songs that explicitly affirm the listener's self-worth particularly those with high cultural resonance and widespread organic adoption represent an untapped resource for population-level psychological intervention.

4.4.4 Methodological Considerations

Several methodological features of the study require comment. The absence of a control group means that the observed SSAM score increase cannot be unambiguously attributed to the specific content of "Diri" rather than to general music listening, temporal maturation effects, or the testing effect produced by completing the same scale twice in rapid succession. The testing effect is a particularly plausible alternative explanation: completing the SSAM at pretest may itself prime self-affirming cognition, artificially inflating posttest scores irrespective of song content. Future studies incorporating a control condition such as an instrumental music condition without lyrics, or a spoken-word neutral content condition would enable cleaner causal inference about the specific contribution of the lyrical content. Additionally, the online delivery of the song via Zoom Meeting introduces variable audio quality and potential environmental distraction effects across participants, reducing experimental control relative to laboratory-based administration.

In addition to these design limitations, the study's reliance on a single exposure to the intervention limits conclusions regarding the durability of the observed effects. A one-time listening session does

not allow for assessment of whether changes in self-affirmation are transient emotional responses or reflect more stable cognitive shifts. Repeated-measures designs with multiple follow-up assessments (e.g., delayed posttests after several days or weeks) would be necessary to determine whether the effects of "Diri" persist over time or diminish once the immediate emotional impact of the music subsides. Without such longitudinal data, the practical implications of the intervention for sustained psychological change remain uncertain.

Furthermore, the use of a relatively small and potentially homogeneous sample may constrain the generalizability of the findings. If participants share similar demographic or cultural backgrounds, their responses to the lyrical content of "Diri" may not reflect how more diverse populations interpret or internalize the same material. Cultural familiarity with the language, artist, or thematic content of the song may also moderate its psychological impact. Future research should therefore include larger and more diverse samples, as well as examine potential moderating variables such as baseline depressive symptoms, music preference, and lyrical comprehension to better clarify for whom and under what conditions the intervention is most effective.

5. Conclusions

5.1 Conclusion

This study examined whether listening to the Indonesian popular song "Diri" by Tulus produces a significant increase in self-affirmation among undergraduate psychology students at Universitas Padjadjaran. The Wilcoxon Signed Rank Test confirmed a statistically significant pretest-to-posttest SSAM score increase ($Z = -6.355$, $p = .000$), with mean scores rising from 5.14 to 5.54 (7.8% increase) and a large effect size ($r = 0.719$). The research hypothesis was supported and the null hypothesis rejected.

These findings contribute to the literature in three ways. Theoretically, they demonstrate that a naturalistic music-listening stimulus specifically, a song with lyrical content explicitly aligned with self-affirmation theory principles can produce significant increases in spontaneous self-affirmation as measured by a validated instrument. Empirically, they provide the first experimental evidence for the psychological effects of a specific Indonesian popular song, extending the music psychology and self-affirmation research literatures to a non-Western cultural context. Practically, they suggest that "Diri" and songs with comparable lyrical content could be incorporated into university counseling and psychological well-being programs as accessible, zero cost self-affirmation support tools for students experiencing academic and social stress.

5.2 Research Limitations

Five limitations qualify the study's findings. First, the absence of a control condition either a no-music condition, an instrumental music condition, or a neutral-content song condition means that the testing effect (pretest administration of the SSAM priming self-affirming cognition at posttest) cannot be ruled out as a confounding explanation for the observed SSAM increase. Second, the sample is homogeneous: all participants were psychology undergraduates at a single Indonesian university, limiting generalizability to students of other disciplines, non-student populations, and older adults. Third, the online delivery format via Zoom Meeting introduces uncontrolled variation in audio quality, home environment distractors, and social presence effects that reduce experimental control relative to laboratory administration. Fourth, only a single song was tested; whether the observed effects are specific to "Diri" or generalizable to other self-affirmation-themed Indonesian songs cannot be determined from the current data. Fifth, no follow-up measurement was conducted; the duration of the SSAM score increase is unknown, and whether song exposure produced sustained changes in self-affirmation tendency or only transient state-level effects requires longitudinal assessment.

5.3 Suggestions and Directions for Future Research

Future research should address the identified limitations through several methodological and substantive extensions. A between-subjects or mixed design with a waitlist or active control condition comparing "Diri" against instrumental music, a neutral-content song, or silence would enable causal attribution of observed SSAM changes to the specific lyrical content rather than to music listening or

testing effects generally. Studies enrolling more diverse samples including non-psychology students, secondary school students, and general adult populations would establish the generalizability of the findings beyond the current homogeneous sample.

Research comparing multiple Indonesian popular songs with varying degrees of self-affirmation lyrical content would enable a dose-response examination of the relationship between lyrical self-affirmation intensity and SSAM score change, directly testing the theoretical proposition that semantically richer self-affirmation content produces stronger effects. Laboratory controlled administration with standardized audio equipment and acoustic environments would improve internal validity. Longitudinal follow-up at 24 hours, one week, and one month post-exposure would examine whether song-induced self-affirmation effects are durable or transient, and whether repeated song exposure produces cumulative benefits. Finally, research integrating neurophysiological measures heart rate variability, cortisol, and EEG-based measures of relaxation would enable examination of the biological mechanisms through which self-affirming song lyrics produce psychological effects, contributing to the broader music psychology and psychophysiology literatures.

Acknowledgement

The authors express sincere gratitude to Pete Harris for granting permission to use the Spontaneous Self-Affirmation Measure (SSAM). The authors also thank the management of the Faculty of Psychology, Universitas Padjadjaran, for logistical support, and all 78 participating students for their voluntary contribution to the study. This research received no external funding.

Author Contributions

NAM, RKN, NCS, DMRS, ARPS, DRT, and NW contributed equally to the conception, design, and implementation of the study. NAM, RKN, and NCS were primarily responsible for literature review development and theoretical framework formulation. DMRS, ARPS, and DRT contributed to data collection, participant recruitment, and experimental procedure implementation. NW supervised the overall research process, provided methodological guidance, and served as the corresponding author responsible for manuscript revision, correspondence, and final approval of the submitted version. All authors participated in data interpretation, contributed to drafting and revising the manuscript critically for important intellectual content, and approved the final version for publication.

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