Research Article

Strengthening Academic Hardiness Through Self-Reflection-Based Narrative Counseling: A Single-Case Research

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ABSTRACT

Purpose of the study: This study aimed to examine the effectiveness of self-reflection-based narrative counseling in strengthening academic hardiness among senior high school students who demonstrate low academic persistence and difficulties in coping with academic challenges.

Methodology: This study employed a single-case research design using an A–B format. Three (n = 3) senior high school students were selected through purposive sampling based on low academic hardiness scores. The intervention consisted of five individual self-reflection–based narrative counseling sessions. Data were collected using an academic hardiness scale administered during the baseline, intervention, and three-week follow-up phases. Data were analyzed using descriptive visual analysis to examine changes in level, trend, and stability of academic hardiness across phases.

Main Findings: The results indicated a clear and consistent increase in academic hardiness across all three participants during the intervention phase compared to the baseline condition. Improvements were observed in the dimensions of commitment, control, and challenge, and were maintained at the three-week follow-up, suggesting a sustained positive effect of the intervention.

Novelty/Originality of this study: This results indicated a clear and consistent increase in academic hardiness across all three participants during the intervention phase compared to the baseline condition. Improvements were observed in the dimensions of commitment, control, and challenge, and were maintained at the three-week follow-up, suggesting a sustained positive effect of the intervention.

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1. INTRODUCTION

Stress is an inseparable part of human life and development, arising from both internal dynamics and external demands resulting from environmental changes [1]. To function adaptively under such pressure, individuals require a psychological capacity known as psychological hardiness, defined as the ability to maintain mental health and optimal performance in highly stressful situations [2]. The concept of psychological hardiness

is rooted in existentialist thought [3]–[4] and was further developed by Maddi into three core components: commitment, control, and challenge [5], [6]. These components enable individuals to perceive stress as an opportunity for growth rather than a threat. Individuals with high levels of hardiness tend to demonstrate cognitive flexibility, emotional resilience, and a constructive readiness to confront difficulties [7].

In educational contexts, this construct has evolved into academic hardiness, which reflects students' capacity to remain committed, maintain perceived control, and interpret academic challenges as opportunities for growth when facing academic stressors [8], [9]. Empirical studies consistently report that students with high academic hardiness demonstrate stronger learning motivation, higher academic self-efficacy, and better academic performance, while exhibiting lower levels of academic stress, burnout, and depressive symptoms [11]–[12]. Additionally, academic hardiness is closely related to students' self-regulation in learning, particularly in maintaining control over the learning process, setting academic goals, and adaptively monitoring progress [13]. Conversely, low levels of hardiness are associated with maladaptive responses such as anxiety, aggression, and social withdrawal [14]. In the Indonesian school context, low academic hardiness has been linked to poor learning discipline, high academic stress, and maladaptive coping strategies among students [15]–[16].

Despite the growing body of evidence highlighting the importance of academic hardiness, a substantial research gap remains regarding its development through systematic intervention [17]. Most existing studies adopt cross-sectional or correlational designs, which restrict causal interpretation and position academic hardiness as a relatively stable trait rather than a modifiable psychological resource [18]–[19]. This methodological tendency limits practical guidance for school counselors who are expected to implement evidence-based interventions to strengthen students' academic hardiness in real educational settings [20].

Furthermore, prior research has predominantly focused on academic outcomes (e.g., grades and motivation) [21]. while paying limited attention to the internal psychological processes underlying changes in commitment, control, and challenge orientations. Similar patterns are evident in Indonesian educational research, where academic hardiness has been identified as a significant predictor of learning persistence and academic adjustment, yet is rarely examined as a direct target of intervention using experimental or single-case designs [22]- [23]. This gap is particularly critical given the increasing academic demands faced by students and the strategic role of school counseling services in fostering psychological strengths rather than merely reducing symptoms [24].

Recent counseling literature emphasizes the strategic role of school counselors in strengthening students' academic resilience and psychological readiness through structured counseling services [25]–[26]. However, many counseling-based interventions—such as cognitive-behavioral approaches, stress management programs, and motivation-enhancement interventions—primarily emphasize symptom reduction and behavioral regulation, with limited focus on cultivating core psychological capacities such as academic hardiness [27]–[28].

Narrative counseling, grounded in postmodern and social constructionist perspectives, emphasizes the role of narrative in shaping individuals' identities and responses to life experiences [29]. This approach views problems as separate from the individual and highlights the importance of meaning reconstruction through language and personal stories [30]–[31]. Through techniques such as self-reflection, problem externalization, and the construction of alternative stories, narrative counseling enables individuals to reinterpret problem-saturated narratives and identify personal strengths [32]–[33].

Recent empirical studies published in Japanese Psychological Research provide growing evidence that narrative-based interventions facilitate resilience development through meaning reconstruction and reflective storytelling processes [34]. Demonstrated that resilience can be enhanced through interventions encouraging individuals to generate and reinterpret original personal narratives [35]. Showed that narrative therapy–based interventions promote psychological insight and adaptive coping through reflective writing and narrative reconstruction [36]. An editorial synthesis further underscores the increasing relevance of narrative-based approaches in contemporary psychological research and practice [37].

Nevertheless, the application of narrative counseling as a structured, self-reflection–based intervention explicitly aimed at strengthening academic hardiness remains underexplored [38]. Most narrative counseling studies emphasize outcomes such as emotional regulation, self-concept, or psychological distress reduction, without systematically examining changes in the specific dimensions of commitment, control, and challenge [39]–[40]. Additionally, narrative counseling studies in school settings often rely on qualitative designs or broad outcome indicators, which limits the ability to capture individual-level change trajectories in clearly operationalized psychological constructs [41]–[42].

Addressing these gaps, the present study applies self-reflection–based narrative counseling as a structured intervention to strengthen academic hardiness among senior high school students using a single-case (A–B) research design. This study aims to (1) examine changes in students' commitment, control, and challenge orientations following the intervention and (2) provide empirically grounded insights into the feasibility and effectiveness of narrative counseling as an evidence-based school counseling strategy. By focusing on individual change processes, this research is expected to contribute both theoretically and practically to the development of strength-based counseling interventions in educational settings [43]–[44].

2. RESEARCH METHOD

Explaining research chronological, including research design, research procedure (in the form of algorithms, Pseudocode or other), how to test and data acquisition [1]-[3]. The description of the course of research should be supported references, so the explanation can be accepted scientifically [2], [3]. This study employed a quasi-experimental method with sample selection based on predetermined criteria relevant to the research objectives. An experimental design is used to determine the possible effect of an independent variable on a dependent variable [45]. In line with this perspective, the purpose of this study was to examine the effectiveness of narrative counseling in improving students' academic hardiness.

The research design used in this study was a single-subject design (SSD). State that the single-subject design focuses on individual data as the primary unit of analysis [46]. This design is appropriate for identifying behavioral changes in individuals following the implementation of a specific intervention [47]. This study applied an A–B design, consisting of two conditions: baseline (A) and intervention (B) [48]. The baseline phase (A) represented the initial condition of students' academic hardiness prior to the intervention [49]. Measurements during this phase were conducted repeatedly until data stability was achieved using an academic hardiness scale, supported by interviews to validate the obtained data [50]. The intervention phase (B) involved the administration of narrative counseling to the research subjects [51]. Measurements of academic hardiness continued during this phase to observe changes following the intervention [52]. Through comparison between baseline and intervention conditions, the impact of narrative counseling on students' academic hardiness could be systematically evaluated [53].

The population of this study consisted of senior high school students enrolled in public high schools in West Java Province, Indonesia, representing the upper-secondary educational level. The students were predominantly 17 years old, reflecting a relatively homogeneous age group within the same institutional and academic context. The population size comprised 925 students, all of whom participated in the initial screening phase. These students demonstrated varying levels of academic hardiness, a psychological construct associated with students' ability to persist, adapt, and remain committed when facing academic challenges [54]-[55]. A specific subgroup of this population exhibited low academic hardiness, which was considered particularly relevant to the objectives of the present study, as students with low academic hardiness are more vulnerable to academic stress and disengagement [56]. This study employed a non-probability sampling technique, specifically purposive sampling, to select participants for the intervention phase [57]. Purposive sampling was chosen to ensure that participants met specific criteria aligned with the research objectives and to support the methodological rigor required in single-subject research designs [58]. An initial screening was conducted using the Academic Hardiness Scale (AHS), which yielded a mean score of $M = 26.34$ and a standard deviation of $SD = 3.76$. Students whose scores fell below the established cutoff point were classified as having low academic hardiness, consistent with previous empirical studies on academic hardiness measurement and categorization [59].

As this study adopted a single-subject research design, the final sample consisted of three senior high school students. The following inclusion criteria guided participant selection: 1) academic hardiness scores below the predetermined threshold, 2) willingness to participate fully in all narrative counseling sessions, and 3) provision of written parental consent. To capture variability in academic hardiness characteristics, each participant represented a distinct configuration of the core academic hardiness dimensions control, commitment, and challenge as conceptualized in the hardiness framework [60]. The intentional selection of participants with differing dimensional profiles was aimed at enabling an in-depth examination of the effectiveness of narrative counseling across diverse manifestations of academic hardiness within a single-subject framework [61].

The instrument employed in this study was an Academic Hardiness Scale (AHS) adapted to measure psychological resilience in the academic context. Academic hardiness is grounded in hardiness theory, which conceptualizes resilience as a personality construct that enables individuals to perceive stressful situations as meaningful challenges and engage in adaptive coping behaviors [62]. In the academic domain, hardiness is operationalized as an interaction among three components: commitment, control, and challenge, which together influence how students cope with academic stressors [63]. The original Academic Hardiness Scale was designed to assess how students respond to academic stress, distinguishing between those who actively engage with challenging academic tasks and those who avoid such demands. Subsequent adaptations, such as the Revised Academic Hardiness Scale (RAHS), have demonstrated robust psychometric properties in higher education samples, including construct validity, convergent validity, and predictive validity for academic outcomes [52].

In the present study, the adapted AHS consisted of [40] items designed to measure the three dimensions of academic hardiness relevant to senior high school students. All items were presented as closed-ended statements and rated using a 4-point Likert-type scale, ranging from 1 (strongly disagree) to 4 (strongly agree). The use of a four-point scale was intended to reduce neutral responses and encourage respondents to indicate a clear position toward each statement. Higher total scores reflected higher levels of academic hardiness. Validity testing of the adapted instrument was conducted using the Rasch model with the assistance of Winsteps software. The results indicated that all items met the established validity criteria, namely Outfit Mean Square (MNSQ)

values between 0.5 and 1.5, Outfit Z-Standard (ZSTD) values between −2.0 and +2.0, and Point Measure Correlation (Pt Measure Corr) values ranging from 0.40 to 0.85, confirming that the items functioned appropriately in measuring academic hardiness. Reliability testing was performed using Cronbach's alpha with the assistance of Winsteps software employing the Rasch model. The analysis yielded a reliability coefficient of 0.97, which is categorized as excellent, indicating very high internal consistency and strong interaction between respondents and instrument items. These results confirm that the adapted Academic Hardiness Scale is both valid and reliable for assessing academic hardiness in the study context. Recent empirical studies further support the use of academically adapted hardiness scales analyzed through Rasch methodology, demonstrating strong reliability and validity indices in educational research [55], [56]. Therefore, the adapted AHS used in this study is appropriate for examining the academic resilience profiles of senior high school students.

Ethical approval for this study was obtained from the Research Ethics Committee of the educational institution where the research was conducted (ethical approval number withheld for peer-review purposes). The study was conducted in accordance with the Ethical Principles of Psychologists and Code of Conduct established by the American Psychological Association (APA). Before the intervention, both the counselor and participants received a comprehensive explanation regarding the study objectives, procedures, confidentiality, and data usage. Written informed consent was obtained from all participants and their parents or legal guardians, as all participants were under 18 years of age. Participation was voluntary, and participants were informed of their right to withdraw at any time without consequences. All counseling sessions were conducted in a private setting and audio-recorded with explicit participant consent. Participants were also allowed to review narrative transcripts before publication to ensure accuracy and confidentiality.

The research procedure followed a chronological sequence consisting of four main stages: (1) initial screening, (2) baseline assessment, (3) intervention implementation,. First, 925 students completed the Academic Hardiness Scale to identify individuals with low academic hardiness. Second, baseline measurements were conducted three times for each participant to ensure stability of pre-intervention data. Third, participants engaged in five sessions of self-reflection-based narrative counseling conducted weekly, with each session lasting approximately 60 minutes.. The overall research procedure is illustrated in Figure 1.
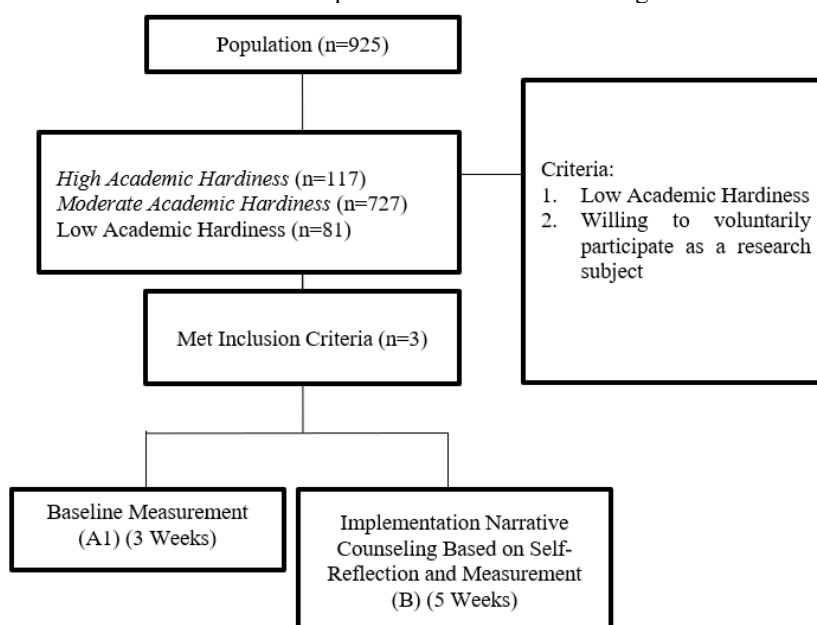

Figure 1. Procedure for Determining Research Subjects

The narrative counseling intervention in this study was conducted through five structured sessions designed to develop clients' psychological resilience within the academic context. Each session lasted 60 minutes and followed the core principles of narrative counseling, emphasizing problem externalization, meaning reconstruction, and the strengthening of personal identity. In the first session, the counselor focused on joining and rapport-building to establish a safe and collaborative therapeutic relationship. At this stage, the counselor explored the client's problem narrative through a problem-saturated description, helping the client map the dominant story that shaped their lived experiences. The session concluded with naming the problem, a process aimed at facilitating the separation between the client and the problem, thereby creating psychological space for narrative change.

The second session aimed to explore the extent to which the problem influenced the client's life through relative influence questioning. Clients were guided to examine how the problem affected their thoughts, emotions, relationships, and academic performance. Simultaneously, the counselor assisted clients in identifying

past situations in which they had successfully coped with similar challenges. Recognition of these past successes served as an initial foundation for constructing alternative stories that reflected previously overlooked resilient capacities. Through this process, clients began to re-identify their competencies and personal strengths.

In the third session, the intervention focused on deconstruction, which involved unpacking the structure of the dominant narrative and examining how it was shaped by social, familial, and academic experiences. The counselor then explored unique outcomes, defined as instances in which clients unexpectedly succeeded in overcoming or resisting the influence of the problem. These unique outcomes became the primary material for reconstructing a more adaptive self-narrative. At this stage, the counselor helped clients link these outcomes to their values, competencies, and personal potentials that reinforced psychological resilience.

The fourth session emphasized strengthening the emerging identity through relational and documentary processes. The counselor facilitated re-membering practices, enabling clients to reconnect with significant others who had previously provided emotional support and contributed to the development of a positive identity. Additionally, clients were guided to create therapeutic documents, such as commitment letters, strength declarations, or change journals, which functioned as reminders of the new narrative being developed. When appropriate, outsider witnesses, such as close friends or family members, were involved to listen to and affirm the clients' progress. This session served to reinforce the new narrative both socially and emotionally.

In the fifth session, the counseling process focused on integrating and consolidating the new self-narrative through telling and re-telling techniques. Clients were encouraged to reflect on the progress they had achieved, reaffirm their stance toward the problem, and formulate strategies for addressing future academic and personal challenges. The session concluded with the end of therapy, confirming that clients had developed a richer, stronger, and more resilient narrative to be sustained in their daily lives. Collectively, these five sessions constituted a comprehensive and progressive narrative intervention framework focused on enhancing psychological resilience through the reconstruction of meaning and personal identity. The schedule and sessions of the self-reflection-based narrative counseling were conducted over five weeks and are presented in Table 1.

Table 1. Schedule and Sequence of Self-Reflection–Based Narrative Counseling Sessions

Phase	Session	Goal	Core Activities
Exploring Problem Narratives and Externalization	1	To assist clients in identifying dominant problem-saturated narratives and initiating the externalization process.	• Establishing a joining and therapeutic rapport in a collaborative stance. • Active listening to elicit problem-saturated descriptions. • Facilitating *naming the problem* to linguistically separate the client from the problem. • Introducing externalizing language consistent with Narrative Therapy principles. • Providing a dominant story identification worksheet.
Mapping the Influence of the Problem and Developing Alternative Stories	2	To help clients understand the influence of the problem and recognize personal strengths as the foundation for alternative narratives.	• Reviewing changes experienced since Session 1. • Applying *relative influence questioning* to explore the effects of the problem on thoughts, emotions, relationships, and academic functioning. • Identifying past successful experiences (*unique positive events*). • Initiating the construction of early *alternative stories*. • Providing a personal strengths reflection worksheet.
Deconstruction and Unique Outcomes Development	3	To deconstruct the dominant narrative and strengthen *unique outcomes* as the basis for a preferred self-narrative.	• Reviewing changes since Session 2. • Conducting *deconstruction* to examine the social, cultural, and contextual formation of the dominant narrative. • Identifying and elaborating *unique outcomes* that reflect resilience and agency.• Linking unique outcomes to personal values, competencies, and preferred life directions.• Providing a unique outcomes exploration

Phase	Session	Goal	Core Activities
			worksheet.
			• Reviewing changes since Session 3.
			• Facilitating *re-membering practices* by reconnecting with significant supportive figures who reinforce positive identity claims.
Re-membering Practices, Identity Reconstruction, and Narrative Witnessing	4	To consolidate the preferred identity through relational reconnection and therapeutic documentation.	• Assisting clients in creating *therapeutic documents* (e.g., commitment letters, strength declarations, change narratives).
			• Involving *outsider witnesses* (optional) to acknowledge and affirm the emerging preferred narrative.
			• Providing an identity reconstruction worksheet.
			• Reviewing changes since Session 4.
			• Facilitating *telling and re-telling* to strengthen the preferred narrative.
Integration, Commitment, and Ending the Narrative	5	To integrate a resilient self-narrative and establish long-term commitment to preferred ways of living.	• Supporting clients in taking a clear position against the problem and formulating strategies for future academic challenges.
			• Reinforcing commitment through personal commitment documents.
			• Conducting *ending therapy* when the preferred narrative is sufficiently established.

Social validity data were collected after the completion of the intervention to obtain an in-depth understanding of participants' perceptions and experiences regarding the implemented program. Data collection was conducted through an online focus group discussion (FGD) facilitated by an independent practitioner who had no prior relationship with the participants, in order to minimize potential social desirability bias [64]. Social validity served to provide qualitative evidence that enriched the researchers' understanding of the intervention's effectiveness and perceived impact [65]. During the discussitoon, participants responded to a series of open-ended questions designed to explore their perspectives on the perceived benefits, relevance, and influence of the self-reflection-based narrative counseling on their cognitive and behavioral patterns.

Data were analyzed using a single-subject A–B design, which focuses on the continuous measurement of individual behavioral changes, with each participant treated as the primary unit of analysis. Single-subject research is designed to identify behavioral changes following the introduction of a specific intervention by comparing performance during the baseline phase (A) and the intervention phase (B) [66]. This approach allows for a precise examination of behavioral change by establishing a stable baseline prior to intervention and observing subsequent changes after treatment implementation. Visual analysis was conducted through continuous measurement across both phases, with data presented graphically to examine behavioral change patterns and trend directions over time [67]. Stability of baseline data was ensured before intervention, and effectiveness was inferred when observable changes occurred in the expected direction toward the target behavior following intervention delivery [68]. Consistent with the recommendations of Wolfe et al. [69], data analysis in single-subject research primarily employed descriptive visual analysis. In this study, intervention effects were examined using split-middle trend estimation, with data displayed in graphical form [70]. Intervention effectiveness was indicated by clear differences in mean levels between baseline and intervention phases [71]. Key analytical aspects included level, trend direction, and condition length.

To support visual findings, simple statistical analyses were also conducted. The two standard deviation (2SD) method was applied to evaluate the magnitude of change between baseline and intervention phases [72]. This procedure involved: (1) calculating the standard deviation of baseline data and multiplying it by two; (2) determining the baseline mean and drawing a horizontal reference line; (3) constructing a second reference line located two standard deviations below the baseline mean; and (4) identifying intervention effects when at least two data points during the intervention phase fell below the 2SD reference line.

Intervention impact was further assessed by examining changes in trend direction, as trend change has been identified as one of the strongest indicators of treatment effects in single-subject designs [73]. Trend magnitude was calculated using linear regression slope estimation, with trend direction evaluated across all phases [74]. The coefficient of determination (R^2) was computed using SPSS version 20 to assess the predictive strength of the trend. Interpretation of R^2 values followed Cohen's guidelines [75], where values of 0.01 indicate

a small effect, 0.09 a medium effect, and 0.25 a large effect. Higher R² values indicate stronger predictive trends. To further quantify intervention effectiveness, the Percentage of Non-Overlapping Data (PND) was calculated between baseline and intervention phases [76]. Given that the narrative counseling intervention was expected to enhance students' psychological hardiness, PND was computed by identifying the lowest baseline score and extending a horizontal reference line from that point. The number of intervention data points falling beyond this reference line was divided by the total number of intervention data points and multiplied by 100. Higher PND values indicate greater intervention effectiveness.

3. RESULTS AND DISCUSSION

This study examined the effectiveness of self-reflection-based narrative counseling in enhancing students' academic hardiness using a single-case A–B design. Visual analysis of the Academic Hardiness Scale (AHS) trajectories (Figs. 2–4) revealed a consistent increasing trend during the intervention phase (B) across all three participants. These findings indicate a positive and sustained intervention effect. Visual inspection of individual participant data (MZ, RF, and AZ) demonstrated a stable and progressive increase in academic hardiness levels throughout the intervention phase, with no evidence of regression to baseline score patterns. This pattern suggests that the observed improvements were maintained consistently following the introduction of the intervention.

All participants exhibited clinically and statistically meaningful improvements in academic hardiness. Quantitatively, mean academic hardiness scores increased by 22.07 points for MZ, 26.27 points for RF, and 13.67 points for AZ. Greater score variability during the intervention phase further reflects positive adaptive dynamics in participants' responses to the counseling process. Effectiveness testing using Percentage of Non-Overlapping Data (PND) reinforced these findings, with two participants achieving 100% PND (classified as highly effective) and one participant obtaining 80% PND (classified as effective). Collectively, these results demonstrate that narrative counseling produced strong and consistent effects on the enhancement of academic hardiness.

Beyond quantitative outcomes, qualitative data revealed a clear reconstruction of participants' self-narratives, shifting from problem-saturated stories toward narratives emphasizing personal strengths, progress, and capabilities. These changes indicate that narrative counseling not only contributes to measurable improvements in academic hardiness scores but also facilitates the development of a more adaptive and positive academic identity.
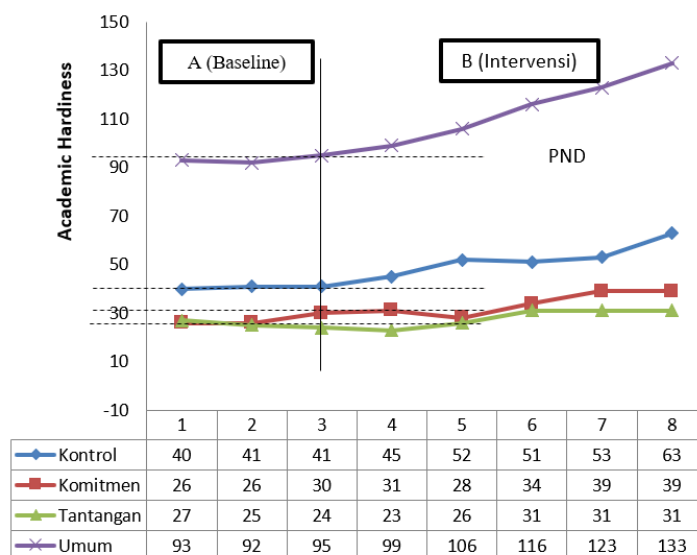

	1	2	3	4	5	6	7	8
Kontrol	40	41	41	45	52	51	53	63
Komitmen	26	26	30	31	28	34	39	39
Tantangan	27	25	24	23	26	31	31	31
Umum	93	92	95	99	106	116	123	133

Figure 2. Academic Hardiness Profile of Participant MZ
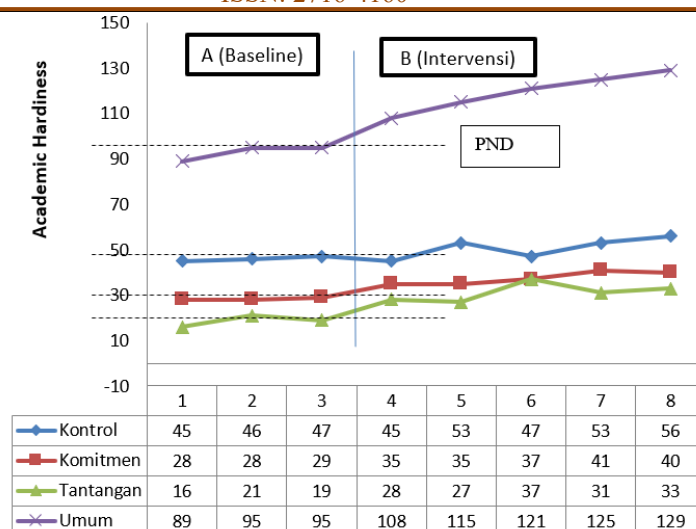
Figure 3. Academic Hardiness of Participant RF

	1	2	3	4	5	6	7	8
Kontrol	45	46	47	45	53	47	53	56
Komitmen	28	28	29	35	35	37	41	40
Tantangan	16	21	19	28	27	37	31	33
Umum	89	95	95	108	115	121	125	129
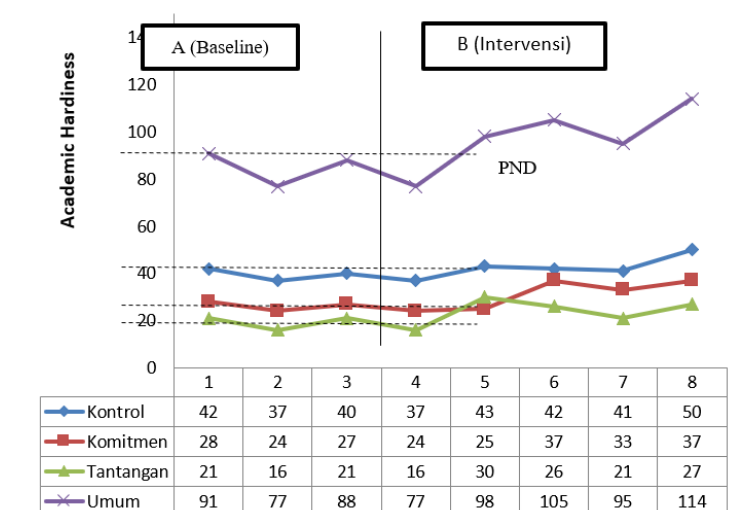
Figure 4. Academic Hardiness of Participant AZ

	1	2	3	4	5	6	7	8
Kontrol	42	37	40	37	43	42	41	50
Komitmen	28	24	27	24	25	37	33	37
Tantangan	21	16	21	16	30	26	21	27
Umum	91	77	88	77	98	105	95	114

Table 2 presents a comparison of the mean scores and standard deviations of academic hardiness between the baseline phase (A) and the intervention phase (B) for the three participants. These data provide a quantitative overview of the changes that occurred following the implementation of narrative counseling. The comparison indicates an increase in academic hardiness scores across all participants, as reflected by higher mean scores during the intervention phase compared to baseline. In addition, changes in standard deviation values suggest increased response variability during the intervention process, reflecting dynamic participant engagement. Overall, this table provides a strong empirical basis for evaluating the effectiveness of the intervention in enhancing students' academic hardiness.

Table 2. Differences in Mean Academic Hardiness Scores and Standard Deviations Between Baseline (A) and Intervention (B)

Participant	Baseline Mean	Standar Deviasi Baseline	Intervention Mean	Standar Deviasi Intervention	GAP
Konseli MZ	93.33	1.53	115.4	13.46	22.07
Konseli RF	93.33	3.79	119.6	8.29	26.27
Konseli AZ	85.33	7.87	99.0	13.69	13.67

Comparative analysis between the baseline and intervention phases revealed a consistent improvement in academic hardiness across all participants. Participant MZ demonstrated an increase in mean score from 93.33 (SD = 1.53) at baseline to 115.40 (SD = 13.46) during the intervention phase, representing a gain of 22.07 points. Participant RF showed the largest improvement, with the mean score rising from 93.33 (SD = 3.79) to

119.60 (SD = 8.29), yielding a difference of 26.27 points. Meanwhile, participant AZ exhibited an increase from 85.33 (SD = 7.87) to 99.00 (SD = 13.69), corresponding to a gain of 13.67 points. Beyond the increases in mean scores, changes in standard deviation values across participants indicate greater variability in responses during the intervention phase, suggesting adaptive engagement with the counseling process. Taken together, these findings provide robust empirical evidence supporting the effectiveness of narrative counseling in enhancing students' academic hardiness.

Based on the analytical results presented in the table, an increase in academic hardiness scores was observed after participants completed the narrative counseling intervention. These findings are consistent with the study by Scheelbeek et al. [64], which demonstrated the effectiveness of narrative counseling in addressing academic difficulties, family conflicts, and behavioral problems. Similarly, Avery [65] reported that narrative counseling facilitates cognitive and emotional changes that contribute to increased hardiness among individuals with traumatic experiences.

With regard to the control dimension, all participants demonstrated developmental progress reflected in a renewed understanding of their capacity to regulate learning behaviors and emotional responses. The control dimension emphasizes the belief that individuals can achieve success through personal effort and effective self-regulation when facing academic pressure [77]. In the present study, improvements in control were primarily influenced by participants' ability to reconstruct meaning from academic experiences through processes of narrative deconstruction and reconstruction. This finding aligns with Graci and Fivush [78], who identified meaning-making as a central mechanism of change in narrative counseling.

A concrete example can be observed in participant MZ, who, through the re-authoring process, identified the figure "mamat" as a symbol of negative influence and "muhammad" as a representation of the ideal self. This shift in meaning fostered awareness that behavioral change was necessary to achieve future goals. The enhancement of control in this case is consistent with concepts of self-efficacy and emotional regulation [79], as well as findings by Muhammad et al. [60] regarding the contribution of control to academic hardiness.

Moreover, experiences of small successes—such as consistent school attendance, timely completion of assignments, managing impulses to skip classes, and maintaining focus during learning activities—served as key sources for strengthening perceptions of personal competence. These mini-successes support the theoretical framework proposed by Bandura [80], which suggests that beliefs about personal ability are reinforced through repeated success experiences. The use of videotalk techniques further strengthened the control dimension by enabling participants to visualize their future selves and formulate concrete action plans, thereby enhancing intentionality and goal clarity [81].

In terms of emotional regulation, participants demonstrated newly acquired abilities to recognize and manage unpleasant emotions, including lethargy, anxiety, and fear of failure. Participant MZ, for instance, utilized communication with parents as an adaptive coping strategy. This finding aligns with Varo et al. [82] emphasis on the importance of coping strategies in managing academic stress. For participants RF and AZ, past emotional memories—such as fear of failing to meet family expectations or experiences of being compared with siblings—played a significant role in shaping the development of control, consistent with the findings of Eccles and Wigfield [83].

Regarding the commitment dimension, two participants (MZ and RF) exhibited substantial improvement, whereas participant AZ demonstrated more limited change (PND = 60%). Commitment tends to develop when individuals perceive difficulties as manageable challenges [84] and when negative experiences are interpreted as temporary conditions within one's control [85]. The increase in commitment observed in MZ and RF was supported by the emergence of alternative narratives through the re-authoring process, particularly those related to responsibility, future aspirations, and awareness of behavioral consequences. Participants increasingly interpreted academic obstacles as adaptive challenges, in line with resilience theory [86].

In contrast, participant AZ continued to display a dominant problem-saturated narrative shaped by longstanding family conflict, strained relationships with teachers, and an identity more closely associated with non-academic activities. Such deeply embedded narratives hindered the reconstruction of new meanings, as described in narrative deconstruction approaches [87]. Narrative documentation, such as letter writing to teachers and parents [88], functioned as a supportive strategy; however, the pace of change remained slower.

For the challenge dimension, narrative counseling proved effective for two participants (MZ and RF). This dimension reflects the ability to perceive stressors as opportunities for growth, such as enrolling in additional courses or engaging in new academic experiences. These findings are consistent with Hakkim and Deb [89] perspective on personal meaning emerging through the process of overcoming adversity. The narrative process also successfully elicited internal resources, including religious discipline, parental communication, and academic support from peers and learning environments. Presuppositional techniques employed by the counselor facilitated participants' projection of personal potential into the future, aligning with principles of positive psychology [90].

Overall, the findings indicate that narrative counseling is effective in enhancing the dimensions of control, commitment, and challenge for most participants. The effectiveness of the intervention is strongly

influenced by participants' capacity to construct new meanings, readiness to reconstruct alternative narratives, and the availability of support from their immediate environments. For participants with dominant problem-saturated narratives, such as AZ, extended intervention combined with additional supportive approaches—particularly family involvement—may be necessary to promote more stable and sustainable change.

The effectiveness of narrative counseling in fostering students' academic hardiness can be observed through visual analysis of the graphical data, which demonstrates an increased profile of psychological hardiness from the baseline phase (A) to the intervention phase (B). These findings indicate a positive impact of the narrative counseling intervention on students' academic hardiness. However, the researchers acknowledge several limitations of the study that should be considered as recommendations for future research. First, the study employed a single-subject A–B design. One limitation of this design is the absence of a follow-up or withdrawal phase after the intervention, which raises concerns regarding the consistency and sustainability of behavioral changes following the narrative counseling intervention. Second, data collection relied solely on standardized measurement using the Academic Hardiness Scale and interview data. Future studies should incorporate systematic observational measures to provide more comprehensive and detailed data, thereby strengthening the robustness of data analysis and interpretation.

The findings of this study provide stronger theoretical clarification regarding the developmental nature of academic hardiness. The observed improvements in the dimensions of control, commitment, and challenge following self-reflection–based narrative counseling indicate that academic hardiness functions as a modifiable psychological capacity rather than a fixed dispositional trait. This result refines previous correlational studies that positioned academic hardiness primarily as a predictor of academic outcomes [11]–[15] by offering intervention-based evidence of change. Consistent with prior research demonstrating the effectiveness of narrative counseling in facilitating cognitive and emotional transformation [64]-[65], the present study extends these findings by explicitly linking narrative meaning reconstruction processes—such as deconstruction and re-authoring—to measurable changes in theoretically grounded hardiness dimensions. In particular, the prominent development of the control dimension supports theoretical perspectives that emphasize meaning-making and perceived agency as central mechanisms of change in narrative-based interventions [78].

At a broader level, these findings allow for cautious generalization that narrative counseling may serve as an effective strength-based intervention for enhancing academic resilience in school settings. The results suggest that self-reflection–based narrative techniques can be strategically utilized by school counselors to foster students' commitment to learning, perceived control over academic demands, and adaptive interpretation of challenges as opportunities for growth, aligning with resilience and positive psychology frameworks [86], [90]. The novelty of this study lies in its focused application of narrative counseling to academic hardiness using a single-case (A–B) design, enabling systematic examination of individual change trajectories across commitment, control, and challenge dimensions. By integrating narrative counseling theory with explicit operationalization of academic hardiness, this research addresses a methodological gap in prior studies that relied predominantly on correlational or qualitative approaches [19]–[22], thereby contributing both theoretical advancement and practice-relevant evidence for evidence-based school counseling.

4.   CONCLUSION

Based on the results of the intervention, it can be concluded that narrative counseling is effective in fostering students' academic hardiness. This effectiveness is evidenced by an increasing trend in academic hardiness scores observed through visual graph analysis between the baseline and intervention phases. Furthermore, the Percentage of Non-Overlapping Data (PND) analysis indicates that narrative counseling was effective in strengthening academic hardiness scores for counselees MZ and RF across the dimensions of control, commitment, and challenge. In contrast, for counselee AZ, the PND results suggest that the effectiveness of narrative counseling remains inconclusive, particularly in enhancing the commitment and challenge dimensions. In addition to quantitative findings, evaluative data revealed that counselees experienced meaningful changes manifested through more adaptive and positive responses to stressful or demanding learning situations. These positive responses emerged as a result of a shift from problem-saturated narratives to alternative, strength-based narratives that highlighted successes and unique skills as key modalities for change. Overall, the findings of this study demonstrate that narrative counseling is generally effective in promoting academic hardiness among students, while also underscoring the importance of individual narrative readiness and contextual support in determining intervention outcomes.

constructive feedback in the completion of this research. This study was conducted without external financial support from public, commercial, or not-for-profit funding agencies.

AUTHOR CONTRIBUTIONS

The author was solely responsible for the conceptualization and design of the study, data collection, implementation of the narrative counseling intervention, data analysis, and interpretation of the results. The author also prepared the original draft of the manuscript, revised the content critically, and approved the final version for publication.

CONFLICTS OF INTEREST

The author(s) declare no conflict of interest.

USE OF ARTIFICIAL INTELLIGENCE (AI)-ASSISTED TECHNOLOGY

The authors declare that no artificial intelligence (AI) tools were used in the generation, analysis, or writing of this manuscript. All aspects of the research, including data collection, interpretation, and manuscript preparation, were carried out entirely by the authors without the assistance of AI-based technologies.

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