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Exploring the impact of emotionalized learning experiences on the affective domain: A comprehensive analysis

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ABSTRACT

The central aim of this research endeavor was to delve into the profound influence of affective learning experiences on the cognitive and psychomotor domains. Concurrently, the study sought to discern the effects of these experiences on students' academic accomplishments within the three domains. This differentiation was predicated upon the interplay between pedagogical resources and the multifaceted dimensions of cognitive, affective, and social contexts for learning.

Over the course of four consecutive semesters, data were meticulously collected from a cohort of 140 undergraduates enrolled at a private-sector university. The experimental cohorts 1, 2 and 3, comprising 35, 46, and 31 students, respectively, were instructed through distinct methodologies - namely, activity learning, reflective learning, and collaborative learning. In parallel, the control group, composed of 28 students, received instruction via the discussion method. The findings eloquently established a robust and affirmative linear correlation between affective experiences and achievements within the cognitive and psychomotor domains. This correlation notably underscored the far-reaching influence of the affective domain upon its cognitive and psychomotor counterparts. Furthermore, the variable of emotional context for learning emerged as a conspicuously noteworthy determinant of students' achievements across all three domains. In contrast, the remaining independent variables - namely, pedagogical resources, cognitive learning context, and social learning context - did not exhibit a substantial contribution. However, it was observed that the amalgamation of all four independent variables yielded a statistically significant relationship with achievements within the cognitive, affective, and psychomotor domains. This underscored the imperative nature of accounting for all pertinent factors when formulating instructional approaches that yield optimal outcomes.

1. Introduction

The teaching-learning process operates within a triad of interconnected domains: cognitive, affective, and psychomotor. Achieving optimal learning outcomes necessitates the seamless integration of these three domains [1]. However, the affective domain, often sidelined, represents a critical facet in education [2]. Scholarly discourse by Pishghadam et al. [3] accentuates emotions' pivotal role in

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shaping learning outcomes, underscoring the potency of positive emotions like pleasure, desire, and satisfaction in augmenting learning effectiveness. Regrettably, the disregard for emotional dimensions within subject matters can precipitate hurdles in cognitive intelligence and behavioral spheres [4–6].

Intrinsic to the affective domain are the emotional experiences of learners, encapsulating attitudes, beliefs, impressions, and sentiments [7] alongside behavioral attitudes such as empathy, interest, and responsibility I-TECH,. The adept prioritization of the affective domain in pedagogical strategies enables educators to mold learners' value systems and beliefs, fostering affective rapport [8], [9]. A pioneering concept, as proposed by Patel [10] who introduced the concept of "emotionalized learning experiences," encompassing pedagogical encounters that forge emotional connections with students, imbuing positive attitudes and values that steer their conduct.

Delving further into the affective domain reveals its manifold constituents, spanning physiological sensations, cognitive processes, behavioral attitudes, emotional acumen, emotional expression, emotional resonance, and emotional management [11], [12]. These components emerge as the linchpins in fostering meaningful bonds with learners, thereby amplifying the efficacy of the learning process.

Historically, emotions languished in the shadow of reason within educational paradigms, owing to their perceived capriciousness and impracticality. This dismissive stance towards emotions contributed to waning enthusiasm and commitment amongst both educators and students [13]. The irony lies in the scarcity of research centered on the affective domain in Pakistan, despite extensive studies touching on curriculum design, evaluation systems, instructional techniques, and related spheres [14], the call for action resonates with the necessity for probing into the incorporation of affective education and emotionalized learning experiences in tertiary education, echoing the clarion call for further exploration into the untapped potential and indispensability of the affective domain within the educational milieu, propagating and endorsing continued research endeavors within this domain surfaces as a categorical imperative.

The scholastic arena is rife with instances where pedagogical approaches disproportionately emphasize the cognitive and psychomotor domains, relegating the affective domain to the periphery. Patel's observation elucidates the predicaments educators face in evaluating affective objectives due to inadequate assessment methodologies, which pale in comparison to the scrutiny directed towards assessing knowledge and skills. The transition from a construct of "teacher professionalism" to that of a "teacher-as-a-technician," as argued by Flanagan [15] has ushered in an era where the affective domain bears the brunt of negligence, his view was further supported by Kinuthia [16]. This transition according to Ref. [17] paints a landscape where educators adhere to predefined sequences, failing to account for individual differences among students. This regimented approach predicates cognitive development while relegating affective growth.

A plethora of reasons underscores the neglect of the affective domain. The intrinsic impulsiveness and erratic nature of emotions render them challenging to manage and instruct. Furthermore, the task of teaching and evaluating feelings and acceptance presents formidable challenges. A paucity of tools tailored to gauge affective outcomes compounds the issue, exacerbating the limited expertise educators wield in shaping students' attitudes and convictions [18]. The tapestry of student diversity interwoven with their value systems poses another layer of complexity, rendering emotionally charged classrooms laborious to manage [19,20].

The affective domain, though overlooked, constitutes an indispensable facet of education essential to fostering effective learning. Its pivotal status notwithstanding, the ascendancy of cognitive and psychomotor domains often relegates the affective sphere to the background, constricting the integration of affective objectives within curricula [21]. The achievement of affective learning objectives stands as a linchpin in safeguarding the longevity of higher education [22,23] enabling learners to be active participants in learning and conduits for their beliefs, attitudes, and values. Neglecting the affective domain engenders teacher-centric classrooms that pivot exclusively on cognitive aims [24,25] birthing graduates ill-equipped in social engineering skills, devoid of social responsibility, and bereft of affirmative attitudes [26].

The repercussions of educational lapse resonates in the clamor for heightened acquisition of soft skills, encompassing personal insight, leadership acumen, effective communication, and problem-solving proficiencies, indispensable for thriving in professional realms [27,28]. Studies unequivocally spotlight the necessity for the Pakistani educational framework to redress its deficiency in addressing affective outcomes, a predicament that births graduates steeped in ambiguity concerning conduct and personal ethics [29, 30]. The affective domain materializes as a cornerstone underpinning a robust and holistic educational model, one that seamlessly integrates cognitive and affective domains to chisel graduates into multifaceted individuals [31]. A curriculum shsorn of affective outcomes stands incomplete, a superficial facade [32,33].

The dimensions of emotionalized learning experiences unravel as fundamental to this discourse, manifesting as pivotal components shaping their efficacy. These dimensions encompass the cognitive landscape, emotional climate, social milieu, and the scaffolding provided by teaching resources [34] constructing a thriving cognitive setting hinges on diverse factors. Foremost, learners should perceive their learning journey as relevant and intimately linked to their prior knowledge. Active engagement and consensus-building foster a participatory atmosphere, broadening horizons and supplying opportunities for practice [35,36]. Leveraging Malcolm Knowles's assumptions on adult learning unveils valuable strategies. The "need to know" assumption warrants an incisive overview of the topic's significance before delving into content and elucidating its relevance [37] "Readiness to learn" underscores the importance of aligning content with learners' personal and professional lives, necessitating task-oriented activities [38] "Orientation to learning" magnifies the craving for practical, performance-driven learning, endowing learning with tangible applications.

Instituting an emotional setting for learning mandates educators to forge emotional connections with learners, enveloping them in a cocoon of continuous support and guidance. Positive thinking, team-building activities, counseling, and group therapy sessions emerge as tools benefiting learners who have encountered prior learning failures or are propelled to learn as a response to life's upheavals [39]. Such an environment reverberates with appreciation for individual disparities, the value of diversity, the salience of

constructive feedback, and the imperative of active participation [40].

Creating a social setting amplifies the learning experience manifold. Interaction, shared experiences, and mutual learning assume pivotal roles. Ergonomics govern the physical classroom environment, encapsulating room dimensions, seating arrangement, temperature control, lighting, color, aesthetics, décor, ventilation and acoustics [41].

In summation, crafting an environment conducive to adult learning mandates attention to relevance, active involvement, and consensus-building. Melding Malcolm Knowles's principles accentuate the learner's need to understand, readiness to learn, and inclination toward practical orientation. An emotional ambiance necessitates emotional bonds, positive thinking, and group activities. A social milieu thrives on interaction and shared experiences. The symbiotic amalgamation of these dimensions begets a holistic learning environment.

Anchoring academic achievement assessment in the cognitive, affective, and psychomotor domains is paramount [42]. Test construction thrives on meticulous planning, covering critical content aspects and marrying items to learning objectives [43,44]. Conformity between test items and learning objectives is essential [45–47].

In the grand tapestry of education, the affective domain surfaces as a potent force, a treasure trove of emotional resonance and human connection. Its integration is indispensable, fostering well-rounded graduates equipped with cognitive prowess, emotional intelligence, and behavioral acumen. The call to embrace the affective domain resounds as a clarion call for comprehensive education and holistic human development.

2. Related studies

There are very less research available on the topic, few are being quoted here as, Madsgaard [48] found that facilitators in simulation-based education recognize and accommodate students' emotions, both positive and negative, as crucial elements in the affective domain. They adapt their strategies to create a psychologically safe learning environment that acknowledges emotions' impact on learning outcomes.

The study by Zach [49] revealed that participants reported a gradual development of awareness concerning the role of emotions in their teaching practice. Beyond personal growth, participants noted an increase in empathy, particularly towards their students. The results underscore the significant impact of the affective learning-based program on enhancing novice physical educators' social-emotional orientation. Wu and Yu [50] found the effects of achievement emotions on various online learning outcomes, which are closely related to the affective domain of learning. The study examines the impact of emotions like enjoyment, pride, relaxation, and negative achievement emotions on factors such as motivation, performance, engagement, satisfaction, and achievement in online learning. These outcomes are integral to the affective domain, which encompasses emotional aspects, attitudes, beliefs, and behavioral attitudes related to learning.

The study, "Exploring the Impact of Emotionalized Learning Experiences on the Affective Domain," holds immense significance in the realm of education. In an era where traditional teaching methodologies often prioritize cognitive and psychomotor domains, this research sheds light on a pivotal yet frequently overlooked aspect—the affective domain. By delving into the effects of emotionalized learning experiences, this study addresses a critical gap in educational research, offering insights that can reshape pedagogical practices and educational outcomes.

The affective domain, encompassing emotions, attitudes, beliefs, and behavioral aspects, plays an integral role in shaping individuals' holistic development. Despite its profound influence, emotional dimensions have long been marginalized in educational frameworks. This study's significance lies in its determination to unravel the transformative potential of emotionalized learning experiences, which foster emotional connections, positive attitudes, and values among learners. By recognizing and nurturing the affective domain, educators can pave the way for more comprehensive, empathetic, and socially responsible graduates.

The research also takes into account the current educational landscape's challenges, where standardized teaching often neglects individual differences and diverse value systems. By exploring the impact of emotionalized learning experiences, educators and policymakers can gain actionable insights into how to address these challenges. This study's findings hold the promise of not only enhancing learning efficacy but also equipping students with the essential soft skills required to succeed in an increasingly interconnected and dynamic world.

Furthermore, this study has implications beyond the classroom. As the professional landscape evolves, employers increasingly emphasize emotional intelligence, teamwork, adaptability, and communication skills—qualities nurtured through affective learning experiences. By examining the effects of emotionalized learning, the research contributes to bridging the gap between educational outcomes and real-world demands, ensuring that graduates are well-prepared for both their careers and personal lives.

In a broader context, this study's significance extends to educational research methodology. By championing the exploration of emotionalized learning experiences, it encourages a shift towards more comprehensive assessment techniques that capture the multidimensional nature of human learning. As such, the research adds to the growing body of knowledge that seeks to revolutionize educational paradigms and offer a more nuanced understanding of effective pedagogy.

Thus, the study's exploration of the impact of emotionalized learning experiences on the affective domain is of paramount significance. By uncovering the potential of emotional connections and positive attitudes in learning, the research addresses a critical gap in education, provides actionable insights for educators and policymakers, and contributes to a more holistic, adaptable, and emotionally intelligent generation of learners.

3. Objectives of the study

The objectives of the study are enumerated below:

1. To examine the effect of the affective domain on the cognitive and psychomotor domains based on the emotionalized learning experiences offered.

- 2. To determine the effect of emotionalized learning experiences on students' academic achievement in the three domains based on the teaching resources and the cognitive, emotional, and social settings for learning.
- 3. To assess the difference in the effect of teaching methods on students' academic achievement in the three domains.
- 4. To compile the benefits derived by students from emotionalized learning experiences

4. Hypotheses of the study

It is hypothesized that the affective domain significantly affects the cognitive and psychomotor domains based on the emotionalized learning experiences offered. There is a considerable difference in the impact of emotionalized learning experiences on students' academic achievement in the three domains based on the teaching resources and the cognitive, emotional, and social settings for learning. It is also hypothesized that there is a significant difference in the effect of teaching methods on students' academic achievement in the three domains.

Table 1
Treatment fidelity assessment grid.

Type of Fidelity	Steps Taken to Ensure Fidelity	How Was Fidelity Assessed?
Fidelity to Theory	The content of the treatment was reviewed by experts. An adequate dose of treatment was received by the control and experimental groups. An equivalent dose of treatment was applied across the four groups.	 The content of the treatment was validated by three experts in the field and its learning outcomes were reviewed by a training specialist and an instructional design specialist. Each of the 4 groups was taught for a total of 21 h (10 weeks) between 9 a.m. and 12 p.m. on Monday, Tuesday, Wednesday and Thursday. The control group was instructed on Mondays, experimental group I on Tuesdays, experimental group 2 on Wednesdays, and experimental group 3 on Thursdays. The same five personal enrichment workshops were taught to each group by the same teacher/researcher. The experiment was conducted in the same university, where similar affective learning conditions were provided to all 4 groups.
Training Provider	 Training of the interventionist Experience/Capacities of the Interventionist Preparation by the intervention 	The researcher acted as the interventionist who is also a faculty member of the University. He is well-versed in the four teaching methods. The researcher/interventionist has over 10 years of experience in training and instructional design with national and international organizations. The interventionist carefully reviewed the treatment content and relevant resources before conducting each workshop for each group.
Treatment Implementation	Application of standardized intervention protocol Measures were undertaken to minimize treatment contamination	1. Participants' Workbook, PowerPoint Presentations and Handouts. Furthermore, the interventionist strictly adhered to achieving the same behavioral objectives for each group. 2. Methods used to minimize contamination: Multiple-treatment interference: This was controlled, as students in all four groups had never been involved in any research study before. Besides, the between-subjects design is meant to provide a single treatment to each participant. The Hawthorne effect was eliminated, as the students in each group were completely unaware of the fact that they were being compared during the entire period of the experiment. The placebo effect did not play any role in the study, as all four groups enjoyed learning through their respective teaching methods. The novelty effect of the study was largely minimized by the 10-week duration of the experiment.
Treatment Receipt	Checking participants' understanding Administration of paper and pencil test	 Participants' understanding was checked through the following methods: Asking different students to provide a recap of major topics taught. Observing how students participated in different activities based on checklists. Evaluating assignments, quizzes, and term papers. The achievement test was administered before and after the treatment, whereas, the emotionalized learning experiences questionnaire was administered after the treatment.
Treatment Enactment	Checking the implementation of new behaviors	 Completion of behavioral objectives achieved questionnaire administered after the treatment. Assessing self-reports by students regarding how they were applying the lessons learned from the personal enrichment workshops in their daily lives (Tasked 3 months after the treatment).

5. Methodology

5.1. Participants

The study conducted an experiment during the spring semester of 2022, which lasted from 14th February to April 15, 2022. The study selected four semesters of BS Education students and included a sample of 140 students. Intact groups were randomly selected by using the cluster sampling technique out of 16 sections of BS Education (8 semesters each semester with two sections i.e. A & B). Of the 140 students, 111 were male (79 %), and 29 were female (21 %). The average age of the students was 21 years. The experimental groups, consisted of 35, 46, and 31 students, respectively, while the control group comprised 28 students.

5.2. Ethics statement

All participants in the experiment provided informed consent, and the study was conducted after obtaining ethical approval from the KIU Diamer Ethical Review Committee. The allocated approval number for this study was Edu-037.

5.3. Design of the study

The study was experimental in nature and utilized a between-subjects design to evaluate the effectiveness of four teaching methods on intact classes of undergraduate students. This design was preferred due to its suitability for testing non-equivalent groups, such as those with similar competencies and abilities and falling within the same age group, which helps reduce passive influences from reactive arrangements.

The researchers considered several factors to ensure the experiment was valid and produced meaningful results. These factors included providing adequate students in each group, avoiding situational bias, and promoting group homogeneity. These steps were taken to address the inherent limitations of the between-subjects design.

5.4. Treatment

The experimental groups, consisting of 35, 46, and 31 students, respectively, were taught using activity learning, reflective learning, and collaborative learning methods, while the control group, comprised of 28 students, was taught using the discussion method. As a motivating factor, participants in the study were given a certificate upon completing the course. The Treat fidelity grid is designed and given as Table 1 below ensuring the integrity and consistency of the implementation of the implementation of the treatment. The details of the four different treatments are discussed as follows:

- 1. Control Group (C): The teacher facilitated the delivery of compelling content by using discussions that were centered on questions that were both problematic and informational in nature. Additionally, the teacher requested volunteers to regularly summarize a key concept discussed in the class in their own words and provide an example to support it. Additionally, students were required to write what they inferred from a particular discussion in their own words. Students were also assigned to write a term paper.
- 2. Experimental Group 1 (X1): To teach the affective content, the activity method was used, operational definitions of which is given in Table 2, the following activities were employed:
- Selecting appropriate responses from a list to answer questions
- Answering multiple-choice questions
- · Matching terms with their corresponding definitions or descriptions
- Engaging in video activities with questions at the end

 Table 2

 Operational definition of the teaching methods used.

Method	Operational Definition
Discussion	Utilizing the discussion method in education can foster students' cognitive development in multiple domains, including creative thinking, critical reasoning, problem-solving, and literary appreciation, while promoting their communication and interpersonal skills. By engaging in dialogic exchanges, students can strengthen their ability to articulate and defend their positions, address counterarguments, and respond to inquiries from their peers, ultimately enhancing their academic proficiency and self-efficacy.
Activity Learning	The "whole-body learning" approach is a teaching methodology that employs a diverse range of active and stimulating activities to facilitate comprehensive learning across the three domains of learning. Essentially, it emphasizes a "learning by doing" approach, which may intersect with other teaching methods based on the content and extent of the subject matter being taught.
Reflective Learning	Reflective learning is an instructional approach that empowers learners to reflect on their personal experiences, abilities, and limitations, and develop a heightened sensitivity toward the challenges faced by others. This introspective technique enables students to gain a comprehensive understanding of their own selves and the surrounding environment, which can foster transformative changes in their attitudes and beliefs, ultimately leading to positive societal impact. Essentially, it is a profound soul-searching journey that allows learners to discover their true selves.
Collaborative Learning	Collaborative learning is a pedagogical approach that encourages students to work together in pairs, triads, or groups of varying sizes to share their experiences, knowledge, and skills, in order to arrive at collective solutions, propose recommendations, report findings, and develop projects either with or without the guidance of the teacher.

- · Listening to real-life stories and anecdotes
- Shuffling tables or groups
- Completing a term paper
- 3. Experimental Group 2 (X2): Affective content was conveyed using reflective learning method, operational definition of which is given in Table 2 below, to employ it following was done;
- Self-assessments were used to impart emotional substance.
- Self-reflection worksheets encouraged students to relate the content to their personal lives.
- The reflection circle allowed each student to answer a teacher-posed question randomly.
- Video activities were used to incite self-reflection.
- A term paper was used as a means to convey effective content.
- 4. Experimental Group 3 (X3): Emotionalized learning experiences were offered by using collaborative learning method operational definition of which is given in Table 2 and it was based on the following:
- Learning Partners: I: Suggesting how concepts relate to the characters or situations depicted in the video clips
- Learning Partners: II: Enabling partners to discuss a particular content and then each writes how it applies to him or her.
- Self-Study Triads: Proposing strategies for addressing organizational problems or those depicted in the video clips
- Learning Triads: Assessing how the characters depicted in the video clips could make effective use of the lessons taught during the workshops
- Term paper

The achievement test was administered before and after the treatment. The symbolic representation of the research design adapted from Best and Kahn (2010) is:

 $O_1 X_1 O_2 O_1 O_3 O_5 O_7 = Pretests$

 $O_3 X_2 O_4 O_2 O_4 O_6 O_8 = Posttests$

 $O_5 X_3 O_6 X_1 X_2 X_3 = Experimental treatments$

 $O_7 C O_8 C = Control treatment$

5.5. Affective content

The program "Discover a New You," a part of the University Personal Enrichment Initiative, incorporated five personal enrichment workshops as a treatment to offer emotionalized learning experiences. These workshops formed the basis of the affective content, which was taught to each group using their agreed-upon teaching method. The operational definitions of the four teaching methods used with the four groups in the study are given as Table 2.

5.6. Variables of the study

In this study, the independent variable was the teaching methods employed and the four dimensions of emotionalized learning experiences, namely, the cognitive, emotional, and social settings for learning and the teaching resources utilized. The dependent variable was academic achievement measured across the three domains of learning. Furthermore, the researchers took measures to control for situational and participant variables, as well as those relating to the internal and external validity of the study.

5.7. Research instruments

The study utilized two research instruments: an achievement test and an emotionalized learning experience questionnaire. Participants were instructed to rate each statement or item in both instruments on a five-point Likert scale, where "Very Low" was assigned a score of 1, "Low" was assigned 2, "Moderate" was assigned 3, "High" was assigned 4, and "Very High" was assigned 5.

5.8. Development of the achievement test

During the planning phase, the research team identified the intended learning objectives, selected relevant topics from each workshop to meet these objectives, and ensured a balanced representation of objectives across the cognitive, affective, and psychomotor domains. They also determined the number of test items needed to effectively cover the topics to be assessed. To facilitate this process, a table of specifications was created to link each topic with its corresponding behavioral objective.

5.9. Development of the emotionalized learning experiences questionnaire

The questionnaire, developed based on a detailed review of related literature and consisting of 41 statements, was designed to be

simple and easy to understand. The questionnaire aimed to cover the dimensions of cognitive, emotional, and social settings for learning and teaching resources. Five open-ended questions were also included in addition to 41 items to gather students' views on the benefits of emotionalized learning experiences, thus total number of items was 46. Four specialists in the field validated the research instruments, and factor analysis was deemed appropriate for the study data. The reliability of the research instruments was determined by calculating Cronbach's alpha, which was 0.874 for the achievement test and 0.942 for the emotionalized learning experiences questionnaire after modifications were made to their items. The data were collected by personally administering the research instruments based on a proper administration schedule and then sorted and tabulated.

In Table 3 the correlation coefficients indicate the strength and direction of the relationships between the domains. The correlation between affective and cognitive domains is.780, indicating a strong positive relationship. Similarly, the correlation between affective and psychomotor domains is.762, indicating a strong positive relationship. The correlation between cognitive and psychomotor domains is.818, also indicating a strong positive relationship.

These correlations are significant at the 0.01 level, meaning that the relationships between these domains are unlikely to be due to chance. These findings suggest strong interrelationships among the three learning domains and that they should be considered when assessing students' learning outcomes.

Multiple regression was conducted to examine the effect of emotionalized learning experiences on students' cognitive, affective, and psychomotor achievement related to the achievement test. Four independent variables (dimensions of emotionalized learning experiences) were entered simultaneously into the analysis, namely:

- The cognitive setting for learning;
- · The emotional setting for learning;
- · The social setting for learning; and
- · Teaching resources.

Various diagnostic tests were performed to fulfill the assumptions related to data compatibility for performing a multiple regression. Mahalanobis distance was applied to remove outliers from the data set, and thus 14 cases were excluded from the results.

Based on Table 5, the emotionalized setting for learning has a statistically significant positive effect on cognitive, affective, and psychomotor achievement, with beta values of 582,0.415 and 378, respectively, and all Sig. Values 0.05. This suggests that emotionalized learning experiences can improve student outcomes across these three domains.

In contrast, the cognitive setting for learning has a negative beta value for cognitive achievement (-0.284), but this relationship is not statistically significant (Sig. = 0.146). The social setting for learning and teaching resources has small beta values and is not statistically significant for any of the three achievement domains.

Overall, the results suggest that emotionalized learning experiences significantly impact students' cognitive, affective, and psychomotor achievement. However, more research is needed to explore the specific aspects of emotionalized learning experiences most beneficial for student learning outcomes.

A one-way relationship between subjects ONE-WAY ANOVA was conducted to examine the effect of teaching methods on students' academic achievement in the three learning domains.

In Table 6, mean and standard deviation of students' academic achievement in the three domains are presented in the table above based on four teaching methods: discussion method (M=79.25, SD=8.316), activity method (M=80.00, SD=9.283), reflective learning method (M=82.00, SD=8.305), and collaborative learning method (M=79.65, SD=8.048). ANOVA results indicate no significant difference in the impact of teaching methods on students' academic achievement in the three domains at the p<.05 level for the three conditions: F(3,136)=0.819, p=.485. Therefore, hypothesis H3 is rejected, and post-hoc tests are not necessary since there is no significant difference in the effect of teaching methods on students' academic achievement in the three domains.

Table 7 presents the top five benefits that students have garnered from their participation in emotionalized learning experiences, specifically the personal enrichment workshops. An overwhelming majority of participants, precisely 89 %, reported a notable boost in their self-confidence. Additionally, 86 % of respondents expressed that they gained a heightened awareness of their personal strengths and weaknesses as a direct result of their participation in these workshops. Moreover, a significant 84 % of participants attributed an increased value to their overall education, thanks to the valuable insights and learning acquired during the experiment. Remarkably, 82 % of respondents disclosed that they have successfully incorporated positive thinking techniques into their daily lives, a skill

Table 3Relationship among the three domains of learning.

Academic achievement		Affective	Cognitive	Psychomotor
Mean		82.18	79.31	79.89
N		140	140	140
Affective	Pearson Correlation (r)	1	.780 ^a	.762 ^a
	Sig. (2-tailed)		.000	.000
Cognitive	Pearson Correlation (r)	.780 ^a	1	.818 ^a
	Sig. (2-tailed)	.000		.000
Psychomotor	Pearson Correlation (r)	.762 ^a	.818 ^a	1
•	Sig. (2-tailed)	.000	.000	

^a Correlation is significant at the 0.01 level (2-tailed).

Table 4Statistical significance of the linear combination of the dimensions of emotionalized learning experiences.

Academic Achievement	Linear combination of the dimensions of emotionalized learning experiences
Cognitive Achievement Affective Achievement Psychomotor Achievement	F(4, 126) = 6.810, p < .000 F(4, 126) = 5.556, p < .000 F(4, 126) = 5.323, p < .001

In Table 4 the linear combination of the dimensions of emotionalized learning experiences is significantly related to cognitive achievement, F (4, 126) = 6.810, p < .000; affective achievement, F (4, 126) = 5.556, p < .000; and psychomotor achievement, F (4, 126) = 5.323, p < .001.

Table 5
Statistically significant beta values showing the effect of emotionalized learning experiences on students' cognitive, affective and psychomotor achievement.

Emotionalized Learning Experience	Cognitive A	Cognitive Achievement		chievement	Psychomotor Achievement		
	(b)	Sig.	(b)	Sig.	(b)	Sig.	
Cognitive Setting for Learning	284	.146	129	.516	155	.436	
Emotional Setting for Learning	.582	.001	.415	.018	.378	.031	
Social Setting for Learning	007	.968	.145	.412	.182	.306	
Teaching Resources	.093	.546	052	.740	027	.864	

Table 6One-way ANOVA to determine the effect of teaching methods on students' academic achievement in the three domains.

Mean and Standard Deviation					
Teaching Method	N			Mean	SD
Discussion	28			79.25	8.316
Activity learning	35			80.00	9.283
Reflective learning	46			82.00	8.305
Collaborative learning	31			79.65	8.048
Total	140			79.89	9.460
ANOVA					
		Df	F		Sig.
Between Groups		3	.819		.485
Within Groups		136	<u></u>		
Total		139			

Table 7Top 5 Benefits derived by students from emotionalized learning experiences.

Benefits Derived by Students	Percentage
Improved self-confidence	89 %
Awareness of strengths and weaknesses	86 %
Increase in the value of the overall education received from the university	84 %
Application of positive thinking techniques	82 %
Application of strategies for creating personal presence (personality development)	80 %

acquired through these workshops. Furthermore, an impressive 80 % of participants reported that they have begun to apply strategies for enhancing their personal presence, showcasing the tangible impact of these emotionalized learning experiences.

6. Discussion

The study's findings indicate that the three learning domains, namely cognitive, affective, and psychomotor, are significantly interrelated. Notably, a strong correlation exists between affective achievement and cognitive and psychomotor achievement. This suggests that the affective domain is crucial in influencing achievement in the other two domains. Furthermore, a strong correlation exists between cognitive and psychomotor achievements, indicating that affective education impacts all three domains. It is worth mentioning that emotionalized learning experiences, such as the cognitive setting for learning, the emotional setting for learning, the social setting for learning, and teaching resources, significantly contributed to students' academic achievement in all three domains.

The results of the study conducted by Khidzir [51] on implementing virtual learning environments in higher education institutions suggest that the three domains of learning are interrelated, albeit weakly correlated. This could be attributed to the fact that the study

was based on respondents' perceptions rather than an experiment determining the effect of affective education on academic achievement. Additionally, the role of the emotional setting for learning was critical in boosting students' overall achievement in all three domains.

Moreover, the study reveals no significant difference in the effect of teaching methods on students' academic achievement in the three domains. However, the discussion method was more productive than the collaborative learning method concerning providing emotionalized learning experiences. This finding is inconsistent with the study by Ganyaupfu [52] which found that the student-teacher interactive method is more effective than the student-centered method in teaching inferential statistics. The consistency in the result could be because courses like inferential statistics need more affective value, and meaningful interaction with students helps teachers make effective connections with them 53.

The top five benefits that students derived from emotionalized learning experiences were improved self-confidence, awareness of strengths and weaknesses, and an increase in the value of overall education in the form of a positive impact on students' CGPA as reported by their respective teachers, positive thinking techniques, and strategies for creating personal presence. These benefits highlight the high affective value of emotionalized learning experiences, which can benefit students in all groups.

Overall, the study underscores the critical role of the affective domain in influencing academic achievement in all three learning domains. Emotionalized learning experiences, especially those that promote the emotional setting for learning, are essential for boosting students' overall achievement. Further research in this area will contribute to the current knowledge on effective education.

7. Conclusion

In the culmination of this comprehensive inquiry, the empirical analysis revealed intricate insights into the interplay of affective, cognitive, and psychomotor domains within the realm of learning experiences. The substantial nature of these relationships became vividly apparent through the calculated correlations – notably, a robust correlation between the affective and cognitive domains, an equally significant correlation between the affective and psychomotor domains, and an unmistakable correlation between the cognitive and psychomotor domains. These correlations distinctly underscored the pronounced positive associations between these dimensions.

Moreover, a pivotal revelation emerged as the linear amalgamation of emotionalized learning experiences exhibited profound statistical significance in its relationship to cognitive, affective, and psychomotor achievements. This was evidenced by notable statistical values, affirming the potent role of emotionalized learning experiences in enhancing student outcomes.

A paramount finding was the definitive influence of the emotionalized learning context, with its salient positive effect demonstrated by substantial values for cognitive, affective, and psychomotor achievements, respectively. These values, coupled with their significance, affirm the potent role of emotionalized learning experiences in enhancing student outcomes.

In contrast, the cognitive setting for learning exhibited a negative value for cognitive achievement, although its statistical significance was not established. The contributions of the social setting for learning and teaching resources, while displaying modest values, remained statistically insignificant across the three achievement domains.

As the results were unveiled through various teaching methods, the study showcased the notable benefits reaped by students through emotionalized learning experiences. The top benefits included heightened self-confidence, a refined understanding of strengths and weaknesses, an elevation in the perceived value of the overall education, adept application of positive thinking techniques, and effective utilization of strategies for personal presence and personality development.

Thus, this research underscores the intricate interplay of emotionalized learning experiences across cognitive, affective, and psychomotor domains, wherein the potency of affective influences emerges as a pivotal factor in fostering student achievements. These findings stand as a testament to the transformative potential of integrating emotions into the learning process, reaffirming its ability to catalyze multifaceted academic growth.

8. Implications

The implications drawn from these findings bear profound significance for the realm of education. The robust interconnections observed among the affective, cognitive, and psychomotor domains underscore the imperative of embracing a holistic approach to learning. This underscores the necessity of acknowledging emotional dimensions alongside cognitive and practical aspects in education. The remarkable positive influence of emotionalized learning contexts on cognitive, affective, and psychomotor achievements accentuates the pivotal role emotions play in enhancing the learning process. This accentuates the urgency for educators to adopt pedagogical strategies that are centered on the unique needs and preferences of students, thereby catering to individual learning styles.

Furthermore, the discernible impact of emotional contexts on learning outcomes underscores the significance of fostering positive emotional environments within educational settings. Striking a harmonious balance between cognitive rigor and emotional engagement emerges as a key consideration, albeit one that requires thoughtful calibration. The benefits students derive from emotionally enriched learning experiences, including heightened self-confidence and increased awareness of strengths and weaknesses, present a compelling case for the integration of emotional engagement into instructional practices.

While the parity in outcomes across various teaching methods implies comparable effectiveness, it underscores the importance of imbuing diverse pedagogical approaches with emotional engagement. These implications possess the potential to shape educational policies, underscoring the role of emotional connections in fostering comprehensive student growth. By embracing this paradigm, education equips individuals to navigate the complexities of an ever-evolving world with resilience and accomplishment.

9. Limitations

The study's findings could be influenced by the specific educational context, curriculum, and teaching methods used. This might limit the applicability of the results to different educational settings. Also, the study relied on self-reported data, participants may provide responses that they perceive as socially desirable or in line with expectations, potentially leading to a bias in the reported emotional experiences. The study focused on the short-term effects of emotionalized learning experiences. Long-term effects on learners' attitudes, behaviors, and academic outcomes might not be fully explored, thus dimensional effect was not measured.

10. Recommendations

It is recommended to provide undergraduates with effective learning experiences to facilitate their self-discovery, goal-setting, self-efficacy, self-esteem enhancement, positive behavioral attitudes, and development of resilience to confront life's challenges. Foster a welcoming and emotionally safe classroom atmosphere where students feel comfortable expressing their feelings and ideas. Teachers should connect lesson content to real-life situations and current events to make learning more emotionally engaging and relatable for students. They may employ a variety of pedagogical approaches, including activity-based learning, reflective exercises, and collaborative projects, to cater to different learning styles and stimulate emotional engagement. Similarly, teachers can incorporate regular reflection exercises that encourage students to think about their emotional responses to the subject matter, their strengths, and areas for improvement. Varying opportunities for students might be created to discuss their thoughts and feelings about the topics being studied, fostering emotional connection and social interaction. By integrating multimedia resources, such as videos, images, and interactive simulations, teachers can evoke emotional responses and enhance comprehension. Such assessments may be incorporated that gauge students' emotional development, such as self-assessment journals or group discussions, to track progress and adapt teaching strategies accordingly. By integrating these recommendations into their teaching practices, educators can create a rich learning environment that not only enhances students' cognitive and psychomotor skills but also nurtures their emotional growth, resulting in more well-rounded and engaged learners.

11. Policy recommendations

Additionally, educators must offer tangible strategies to teachers to effectively integrate the affective domain in the teaching-learning process. Researchers in Pakistan must also provide assistance to promote effective education. However, educators and researchers must first be given an orientation on the affective domain concerning its role and genuine potential.

An exciting avenue for future studies could involve examining how the political climate and policy decisions at the institutional or governmental level influence the integration of affective learning experiences in educational settings. Understanding how political factors can either support or hinder the implementation of emotionally engaging pedagogical methods could provide valuable insights. Investigating how political factors shape educational policies related to affective learning experiences in diverse cultural and national contexts could be an intriguing area of research. Comparative studies could reveal how political ideologies and policies impact the adoption of these practices globally.

Data availability statement

The authors are unable to share the data since the participants have explicitly requested that it remains confidential and not be disclosed.

CRediT authorship contribution statement

Yen-Ku Kuo: Project administration. **Sadia Batool:** Project administration, Conceptualization. **Sheila devi:** Formal analysis, Data curation. **Tehseen Tahir:** Validation, Methodology. **Jiawen Yu:** Writing – original draft.

Declaration of competing interest

The authors declare the following financial interests/personal relationships which may be considered as potential competing interests: Dr Sadia Batool reports was provided by Karakoram International University. Dr Sadia Batool reports a relationship with Karakoram International University that includes: employment. Has patent pending to.

Appendix A. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.heliyon.2023.e23263.

Appendix A

Annexure A
Table of specification

Contents	Objectives									
	Cognitive		Affective			Psychomotor			Total	
	Com.	Ana.	Eva.	Res.	Org.	Cha.	Man.	Art.	Nat.	
Workshop 1: Enhancing Personal Insight										
Individuals with strong Personal Insight	1									1
Obstacles to Personal Insight		1								1
Benefits of Personal Insight			1							1
Elements making up true Personal Insight				1	1	1				3
Personal Inventory - Worksheet							1	1		2
Self-Management Skills									1	1
Workshop 2: Cultivating Happiness through a Positive Outloo	k on Life									
Positive Attitude	1		1	1	1	1				5
Leading a Meaningful Life -Worksheet		1								1
Time-tested Techniques for Happiness based on Positive Thought							1	1		2
Practice developing a Positive Outlook on life - Worksheet									1	1
Workshop 3: Creating a Professional Presence and Image										
Checklist to make sure you are Groomed Properly	1									1
Standing out from the rest		1							1	2
Acting as an Example for others			1							1
Golden Attitudes for the Workplace				1	1	1	1			4
What is Outstanding Behavior at work?								1		1
Workshop 4: Unlocking the Winner Within										
Unlocking the Winner Within	1	1		1						3
Significance of Re-inventing oneself			1							1
Future Wise: Be a learner to take hold of your Future					1	1				2
Time-tested 7Rs to re-invent yourself							1			1
Discovering the Winning Track								1	1	2
Workshop 5: Building Inner Strength and Fortitude										
Essence of Personal Enrichment		1	1	1						3
Inner Strength and Fortitude	1				1	1	1			4
Importance of Self-Worth								1		1
Adopting a healthy Lifestyle									1	1
Total number of Items	5	5	5	5	5	5	5	5	5	45
Percent of Evaluation (%)	33.33	•	•	33.33	Ü	Ü	33.33	·	•	100

Annexure B

Learning objectives and content

Learning Objectives

Workshop Title: Enhancing Personal Insight

After the session the participants will be able to do the following;

- Identify Winning Traits: Recognize the characteristics that define winners, including their role as idea champions, self-learners, trendsetters, facilitators, and problem-solvers.
- Understand Inner Winner Concept: Grasp the concept of unlocking one's inner winner, encompassing the discovery of strengths and mental capabilities crucial for achieving a successful life.
- Justify Self-Reinvention: Provide rationale for the necessity of selfreinvention, highlighting how it enables individuals to surpass limitations and foster personal growth.
- Confident Idea Presentation: Develop the ability to confidently present ideas and viewpoints, effectively leveraging strengths for communication and influence.
- Expand Global Thinking: Apply strategies to broaden one's global perspective, fostering a forward-looking mindset and knowledge of the world
- Cultivate Empathy: Foster deeper connections by nurturing empathy and sensitivity towards others' needs, establishing stronger relationships.
- Apply 7Rs for Reinvention: Implement the comprehensive 7Rs framework (Reflect, Relax, Repair, Relate, Rejuvenate, Refrain, and Reassess) to guide the process of self-reinvention.
- Adapt Ideas for Fulfillment: Modify workshop-derived concepts to achieve
 personal fulfillment and holistic growth, tailoring them to individual needs.

Learning Content

The content encompasses the following salient focal points:

- Exposition of Traits Characterizing Self-Aware Individuals: A
 comprehensive elucidation of the traits and comportment that commonly
 typify individuals exuding pronounced personal insight.
- Exposition of Hindrances to Self-Awareness Augmentation: A dynamic forum for interactive discourse surrounding the intrinsic and extrinsic impediments thwarting the evolution of personal insight.
- Illumination on the Utility of Self-Awareness: A didactic presentation expounding upon the manifold ways by which personal insight invariably culminates in individual and academic accomplishments, in addition to enhancing interpersonal associations.
- Recognition and Deliberation of Strengths and Deficiencies: Interactive
 activities designed to galvanize participants in the appraisal and explication
 of their strengths and limitations.
- Articulation and Pursuit of Aspirational Targets: Proffering techniques to harness self-awareness as a propellant for formulating and attaining meaningful life objectives.
- Concretion of Pragmatic Strategies for Daily Self-Awareness: Furnishing
 participants with actionable precepts to seamlessly weave self-awareness into
 their quotidian routines.
- Exploration of Diverse Methodologies for Augmented Self-Knowledge: Initiation of participants into a spectrum of methodologies, including

(continued on next page)

Annexure B (continued)

Learning Objectives

 Manage Personal Initiatives: Develop skills to effectively manage personal initiatives, harnessing them to gain a competitive edge and achieve personal goals.

Workshop Title: Cultivating Happiness through a Positive Outlook on Life After the session the participants will be able to do the following;

Workshop Title: Creating a Professional Presence and Image: Enhancing Communication, Grooming, and Productivity

- 1. Explore the Importance of Personal Grooming: Understand how personal grooming impacts perception, confidence, and professional image.
- Uncover the Secrets of Effective Conversations: Analyze the components
 of successful conversations, including active listening, empathy, and nonverbal cues
- Assess Role Models' Contribution to Productivity: Examine how role
 models inspire and drive employee productivity through their behavior and
 leadership.
- Promote Positive Interactions: Emphasize the significance of warm greetings, smiles, and positive reinforcement in fostering connections.
- Enhance Daily Facilitation Skills: Provide strategies for offering support and assistance in daily interactions.
- Acknowledge and Appreciate Efforts: Understand the impact of praise and appreciation on individuals and teams.
- Develop Strategies for Team Bonding: Explore techniques for building strong relationships and trust among team members.
- Integrate Diversity Sensitivity Lessons: Apply the lessons from the diversity sensitivity kit to promote inclusivity and respect in various settings.
- Create a Lasting Visual Impact: Learn to stand out and express individuality while maintaining professionalism.

Learning Content

- introspective journaling, reflective contemplation, and proactive solicitation of feedback, all poised to facilitate a deeper understanding of oneself.
- Calibration of Initiatives for Self-Enhancement: Dissemination of strategies for judiciously orchestrating personal initiatives that aim at the refinement of self-management abilities, thereby perpetuating the cycle of perpetual self-awareness enrichment.

The content encompasses the following salient focal points:

- Introduction to Positive Mental Attitude (PMA): An overview of the concept of Positive Mental Attitude, emphasizing its role in shaping perceptions, emotions, and overall well-being.
- Understanding the Dynamics of Happiness and Meaning: Delving into the distinction between leading a happy life and living a meaningful life, examining the ways in which they intersect and diverge.
- The Role of Positive Thinking in Happiness: A comprehensive exploration
 of how cultivating positive thinking patterns can influence happiness levels
 and overall life satisfaction.
- Practicing Gratitude and Apology: Interactive exercises encouraging
 participants to embrace gratitude by expressing appreciation more often and
 to acknowledge the importance of accountability through genuine apologies.
- Nurturing Humility: A discussion on the significance of humility in personal growth and relationship dynamics, along with practical strategies to embody humility.
- Infusing Humor into Daily Life: A creative exploration of the positive impact
 of humor on happiness, accompanied by techniques to inject humor into daily
 routines.
- Techniques for Enhanced Happiness: Introducing various techniques that
 participants can incorporate into their lives, including mindfulness practices,
 positive self-affirmations, and fostering meaningful connections.
- Developing a Personalized Positivity Plan: Guiding participants in crafting an individualized plan to integrate learned strategies into their lives, ensuring a sustained positive outlook.

The content encompasses the following salient focal points:

1. Introduction to Creating a Professional Presence

- · Welcoming participants and establishing the session's purpose.
- Explaining the connection between personal image and professional success.

2. The Power of Personal Grooming

- Discussing the influence of personal grooming on self-confidence and perception.
- Exploring grooming elements like attire, hygiene, and grooming practices.
- Provide practical tips for maintaining a polished appearance.
- 3. Mastering Effective Conversations
- Breaking down the components of skillful communication.
- Discussing the importance of active listening, empathy, and non-verbal cues.
- Addressing common communication barriers and strategies to overcome them.
- 4. Role Models and Employee Productivity
- Examining the role models' impact on employee motivation and productivity.
- Analyzing traits and behaviors that contribute to effective role modeling.
- Sharing examples of successful companies that leverage role models.
- 5. Positive Interactions and Daily Facilitation
- Highlighting the significance of warm greetings, smiles, and their influence on relationships.
- Providing strategies for facilitating interactions and offering assistance in daily life.

6. Appreciation and Recognition

- · Explaining the psychological impact of praising and appreciating others.
- Discussing effective ways to acknowledge efforts and achievements.
- 7. Building Strong Team Bonds
- · Presenting strategies to enhance team cohesion and trust.
- · Introducing team-building activities and communication techniques.

8. Applying Diversity Sensitivity Lessons

- · Recapping key lessons from the diversity sensitivity kit.
- Exploring practical ways to integrate inclusivity and respect in personal and professional life.
- 9. Crafting a Memorable Visual Impact

(continued on next page)

Annexure B (continued)

Learning Objectives

Learning Content

- Discussing the importance of standing out while maintaining professionalism.
- Providing insights into using clothing, accessories, and style to create a distinct image.
- 10. Synthesis and Key Takeaways
- Summarizing the main points covered in each section.
- · Reinforcing the connection between a professional presence and success.
- 11. Interactive Activities and Discussions
- Engaging participants in role-playing conversations and group discussions.
- Encouraging sharing personal experiences related to diversity sensitivity.
- 12. Q&A Session and Networking
 - Providing an opportunity for participants to ask questions and seek clarifications.
 - · Fostering networking among participants to connect and share insights.
- 13. Resources and Continued Growth
 - · Offering recommended reading materials, online courses, and tools.
 - · Gathering feedback for session improvement and future development.

The content encompasses the following salient focal points:

- Workshop Title: Unleashing Your Inner Winner: Strategies for Personal Growth and Success
- · After completing the session the participants will be able to;
- Identify Winning Traits: Learn to recognize qualities that define winners, such as being idea champions, self-learners, trendsetters, facilitators, and problem-solvers.
- Understand Inner Winner Concept: Grasp the idea of unlocking the inner winner within, discovering strengths and mental capabilities for a successful life
- Justify Self-Reinvention: Justify the need to re-invent oneself, overcoming limitations and challenges for personal growth.
- Confident Idea Presentation: Develop confidence in presenting ideas and viewpoints effectively.
- Expand Global Thinking: Implement strategies for globalized thinking and future-oriented perspectives.
- Cultivate Empathy: Foster deeper connections through empathy and sensitivity towards others' needs.
- Apply 7Rs for Reinvention: Implement the 7Rs framework (Reflect, Relax, Repair, Relate, Rejuvenate, Refrain, and Reassess) for self-reinvention.
- Adapt Ideas for Fulfillment: Modify workshop ideas for personal fulfillment and growth.
- Manage Personal Initiatives: Develop skills to manage initiatives for success and a competitive edge.

1. Introduction to Unleashing Your Inner Winner

- Welcome and session overview.
- Connection between personal growth and success.
- 2. Traits of Winners: Defining Excellence
- Exploring defining qualities of winners.
- · Examining how winners excel in different roles.
- 3. Unlocking the Inner Winner: A Journey Within
- Understanding discovering the inner winner.
- Importance of self-awareness and potential realization.
- 4. The Power of Self-Reinvention
- Necessity of embracing change and self-reinvention.
- $\bullet \ \ Real\mbox{-life examples of transformative individuals.}$
- 5. Confident Communication for Influence
- $\bullet\,$ Techniques for confident idea presentation.
- Effective communication skills for growth.
- 6. Thinking Beyond Boundaries: A Global Perspective
- Strategies to broaden global thinking.
- Advantages of a global mindset.
- 7. Empathy and Connection: Building Relationships
- Significance of empathy in connections.
- Enhancing relationships through sensitivity.
- 8. The 7Rs Approach to Self-Reinvention
- Introduction and components of the 7Rs framework.
- Practical guidance on applying each step.
- 9. Customizing Ideas for Fulfillment
- Adapting ideas for personal fulfillment.
 The role of customization in a fulfilling life.
- 10. Taking Charge: Personal Initiatives for Success
- Strategies for managing personal initiatives and goal setting.
- Encouraging proactive steps towards potential realization.
- 11. Reflection and Integration of Key Concepts
 - Summarizing main points from each objective.

 Frankasing continuous growth and improvement.
 - Emphasizing continuous growth and improvement.
- 12. Interactive Activities and Group Discussions
- Engaging participants in discussions and exercises.
- Encouraging self-reflection and insights sharing.
- 13. Q&A Session and Participant Networking
- Offering a platform for questions and experiences sharing.
- Facilitating participant networking for ongoing support.
- 14. Resources for Further Exploration
 - · Recommending resources for personal development.
 - · Collecting feedback for future session enhancements.

The content encompasses the following salient focal points:

- 1. Introduction to Building Inner Strength and Fortitude
- Welcoming participants and outlining the session's goals.
- Highlighting the connection between inner strength and personal growth.
- 2. Exploring Inner Strength: Its Significance
- Defining inner strength and its relevance in facing challenges.
- Discussing the mental fitness required for overcoming adversity.
- 3. Comparing Benefits of Personal Enrichment

(continued on next page)

Workshop Title: Building Inner Strength and Fortitude After the session, the participants will be able to:

- Explain the Importance of Inner Strength: Understand inner strength as the mental resilience and stamina to confront life's challenges without negative consequences.
- Compare Benefits of Personal Enrichment Activities: Analyze and compare the advantages of different personal enrichment activities to recognize their significance.

Annexure B (continued)

Learning Objectives

- Justify Personal Enrichment for Fulfilling Life: Evaluate and justify the importance of personal enrichment initiatives in enhancing the quality of life.
- Choose Suitable Personal Enrichment Activities: Make informed choices about personal enrichment activities to break free from monotony and mediocrity.
- Consider Making a Difference in Others' Lives: Recognize the role of contributing to others' lives as a vital component of building inner strength.
- Persevere during Tough Times: Learn to persist and maintain hope during challenging periods, drawing lessons from personal enrichment sessions.
- Implement Guidelines for Inner Strength: Apply time-tested guidelines for cultivating inner strength and fortitude.
- Adapt Strategies for Self-Worth Enhancement: Utilize various strategies to enhance self-worth and self-esteem.
- Manage a Healthy Lifestyle Plan: Develop and manage a personalized plan for adopting a healthy lifestyle, contributing to overall joy and well-being.

Learning Content

- Analyzing and contrasting the benefits of different personal enrichment activities.
- Recognizing the role of varied activities in personal development.
- 4. Personal Enrichment for Fulfillment
- Justifying the role of personal enrichment in leading a fulfilling and satisfying life.
- Evaluating the positive impact of enrichment initiatives.
- 5. Empowerment through Activity Selection
- Guiding participants to choose appropriate personal enrichment activities.
- Demonstrating how diversification contributes to personal growth.
- 6. Impact through Making a Difference
- Emphasizing the importance of contributing to others' lives as a means of building inner strength.
- Illustrating the ripple effect of positive actions.
- 7. Resilience during Challenges
- Embracing perseverance and hope as lessons from personal enrichment.
- · Discussing strategies for maintaining resilience in tough times.
- 8. Guidelines for Inner Strength Development
- Introducing practical guidelines for building inner strength and fortitude.
- Providing actionable steps to cultivate mental resilience.
- 9. Strategies for Self-Worth Enhancement
- Exploring a range of strategies to boost self-worth and self-esteem.
- Encouraging participants to adopt techniques that resonate with them.
- 10. Managing a Healthy Lifestyle Plan
 - Discussing the importance of a healthy lifestyle in fostering overall wellbeing.
 - Guiding participants in creating and managing personalized plans.
- 11. Reflection and Integration of Key Concepts
 - · Summarizing the main points from each objective.
- Reinforcing the idea that inner strength is cultivated through purposeful actions.
- 12. Interactive Activities and Group Discussions
- Engaging participants in interactive exercises and group discussions.
- · Encouraging sharing of experiences and insights.
- 13. Q&A Session and Participant Networking
- Providing an opportunity for participants to seek clarifications and connect with peers.
- Promoting networking for ongoing support and inspiration.
- 14. Resources for Continuing Growth
- Recommending resources for further personal development.
- Collecting feedback for enhancing future sessions and content.

References

- [1] A. Brockbank, I. McGill, Facilitating Reflecting Learning through Mentoring and Coaching, first ed., Kogan Page Limited, London, 2006.
- [2] T. Hyland, Mindfulness, adult learning and therapeutic education: integrating the cognitive and affective domains of learning, Int. J. Lifelong Educ. 29 (5) (2010) 517-532, https://doi.org/10.1080/02601370.2010.512792.
- [3] R. Pishghadam, S. Ebrahimi, A.R. Esterabadi, A. Parsae, Emotions and Success in Education: from Apathy to Transpathy. Cognition, Emotion, and Education, 2023, https://doi.org/10.22034/cee.2023.172495.
- [4] R.J. MacFadden, Souls on ice: incorporating emotion in web-based education, J. Technol. Hum. Serv. 23 (1–2) (2005) 79–98, https://doi.org/10.1300/ J017v23n01 07.
- [5] F.R. Dar, Rethinking education emerging roles for teachers, Universal Journal of Educational Research 3 (2) (2015) 63–74, https://doi.org/10.13189/ ujer.2015.030201.
- [6] M. Hamid, Organizational learning, privacy concern, innovation capability impact on creative performance, Journal of Digitization and Information System 2 (2) (2022) 122–138.
- [7] T.E. Rahmat, S. Raza, H. Zahid, J. Abbas, F.A. Mohd Sobri, S.N. Sidiki, Nexus between integrating technology readiness 2.0 index and students' e-library services adoption amid the COVID-19 challenges: implications based on the theory of planned behavior, J. Educ. Health Promot. 11 (2022) 50, https://doi.org/10.4103/jehp.johp.508_21.
- [8] J.M. Tiamwatt, Intensive school-based instructional supervision (ISBIS) influences academic teaching performance, Int. J. Membr. Sci. Technol. 10 (2) (2023) 149–154. 10.15379/ijmst.v10i2.1177.
- [9] S. Batool, T. Akhter, Causal attribution patterns of mainstream school students and their effect on achievement, FWU Journal of Social Sciences 6 (2) (2012) 131–134. https://www.proquest.com/openview/f3422862740bcae71449e743116b2288/1?pq-origsite=gscholar&cbl=55194.
- [10] R.N. Patel, in: Rev (Ed.), Educational Evaluation: Theory and Practice, Himalaya Publishing House, Mumbai, 2010.
- [11] M. Rabahi, H. Yusof, M. Awang, Model of hope: leading learning among the indigenous orang asli students, International Journal of Humanities, Arts and Social Sciences 2 (1) (2016) 1.
- [12] A. Brett, M. Smith, E. Price, W. Huitt, Overview of the Affective Domain. Educational Psychology Interactive, Valdosta State University, Valdosta, GA, 2003. http://www.edpsycinteractive.org/topics/affect/affect.html;
 - [a] M. Malinda, Effectiveness of entrepreneurship and innovation learning methods. Case study at Universitas Kristen Maranatha, Bandung, Indonesia, International Journal of Business and Administrative Studies 4 (3) (2018) 122.

[13] M.N.C.H.P. OO, The status and the problem of western vocal music teaching in Myanmar, Journal of Advanced Research in Social Sciences and Humanities 1 (1) (2016) 9–17

- [14] T. Tahir, S. Batool, R. Gul, U. Ishfaq, Relationship between self-concept and academic achievement: an evidence of female students, Educ. Law 11 (5s) (2023), https://doi.org/10.52783/rli,v11i5s.888. Article Sidebar.
- [15] N. Flanagan, Take back teaching now, Educational Leadership Journal 71 (2014) 34-38. https://www.ascd.org/el/articles/take-back-teaching-now.
- [16] H.J. Kinuthia, Teacher Professionalism, Education Reform and 21st Century Skills in the United Arab Emirates. (Doctoral Dissertation), University College London, Institute of Education, 2021.
- [17] H.J. Kinuthia, Teacher Professionalism, Education Reform and 21st Century Skills in the United Arab Emirates. (Doctoral Dissertation), University College London, Institute of Education, 2021.
- [18] S. Yu, J. Abbas, A. Draghici, O.H. Negulescu, N.U. Ain, Social media application as a New paradigm for business communication: the role of COVID-19 knowledge, social distancing, and preventive attitudes, Front. Psychol. 13 (2022), 903082, https://doi.org/10.3389/fpsyg.2022.903082.
- [19] R. Gul, T. Tahir, S. Batool, U. Ishfaq, H. Nawaz, Effect of different classroom predictors on students' behavioral engagement, Journal of Positive School Psychology 6 (8) (2022) 3759–3778. http://journalppw.com.
- [20] H. Hashim, S. Salam, S.N.M. Mohamad, Investigating learning styles for adaptive massaive open online cource (MOOC) learning, Journal of Advances in Humanities and Social Sciences 3 (5) (2017) 282–292.
- [21] S.K. AL-Takhayneh, W. Karaki, O.A.A. Alhwayan, R. Khader, A.J.O.A. Altarawneh, Mother's lifestyle in digital era, life satisfaction and well-being: moderating role of E-learning anxiety among Jordanian mothers of grade 1-3 students, Pakistan Journal of Life and Social Sciences 20 (1) (2022) 63–79.
- [22] K. Shephard, Higher education for sustainability: seeking affective learning outcomes, Int. J. Sustain. High Educ. 9 (1) (2008) 87.
- [23] H.X. Li, Digital knowledge and innovativeness: catalysts for digital entrepreneurship success in taiwan's architecture and interior design industries, Journal of Digitovation and Information System 3 (1) (2023) 1–15.
- [24] C.M. Rupani, M.I. Bhutto, Evaluation of existing teaching-learning process on Bloom's Taxonomy, Int. J. Acad. Res. Bus. Soc. Sci. 1 (2011) 119–128, https://doi.org/10.6007/IJARBSS/v1-i2/42.
- [25] S. Batool, T. Tahir, U. Ishfaq, M. Karamat, H. Bibi, The teaching milieu of Pakistan: rudiments for an efficacious teacher, Webology 18 (3) (2021) 594-609.
- [26] R.N. Patel, in: Rev (Ed.), Educational Evaluation: Theory and Practice, Himalaya Publishing House, Mumbai, 2010.
- [27] E. Pierre, J. Oughton, The affective domain: undiscovered country, Coll. Q. 10 (4) (2007) 1-7. https://core.ac.uk/download/234634041.pdf.
- [28] L.A.B. Shing, P.J. Xiaodie, Exploring the relationship between leadership, organizational culture, trust, and effectiveness of knowledge sharing by forced learning, Journal of Administrative and Business Studies 3 (2) (2017) 90–104.
- [29] J.M. Kuboja, B.M. Ngussa, Affective learning and cognitive skills improvement: experience of selected schools in Arusha, Tanzania, Int. J. Acad. Res. Prog. Educ. Dev. 4 (2) (2015) 38–53, https://doi.org/10.6007/IJARPED/v4-i2/1566.
- [30] D. Arli, G. Setiawan, Who is more religious and ethical, Republicans, Democrats or others? International Journal of Religion 4 (1) (2023) 19–38, https://doi.org/10.33182/jior.v4i1.2205.
- [31] T. Hyland, Mindfulness, adult learning and therapeutic education: integrating the cognitive and affective domains of learning, Int. J. Lifelong Educ. 29 (5) (2010) 517–532. https://doi.org/10.1080/02601370.2010.512792.
- [32] P. Dettmer, New blooms in established fields: four domains of learning and doing, Roeper Rev. 28 (2) (2006) 70–78, https://doi.org/10.1080/
- [33] M.I. Khan, Sophistication of medical education and teaching Bioethics editorial, Journal of Rawalpindi Medical College 18 (1) (2014) 1–2, https://doi.org/
- [34] J. Yao, A. Ziapour, J. Abbas, R. Toraji, N. NeJhaddadgar, Assessing puberty-related health needs among 10-15-year-old boys: a cross-sectional study approach, Arch. Pediatr.: organe officiel de la Societe française de pediatrie 29 (4) (2022) 307–311, https://doi.org/10.1016/j.arcped.2021.11.018.
- [35] C. Egle, A Guide to Facilitating Adult Learning, Rural Health Education Foundation, Deakin, Australia, 2007.
- [36] J. Abbas, J. Aman, M. Nurunnabi, S. Bano, The impact of social media on learning behavior for sustainable education: evidence of students from selected universities in Pakistan, Sustainability 11 (6) (2019) 1683, https://doi.org/10.3390/su11061683.
- [37] M. Deeves, Education Lift off: Key Principles and Strategies for Teaching Adult Learners Presentation, Public Health Ontario. Agency for Health Protection and Promotion, Toronto, ON, 2015.
- [38] H.W. Post, Teaching Adults: what Every Trainer Needs to Know about Adult Learning Styles, Pacer Center, Minneapolis, MN, 2010.
- [39] G. Gunawardena, Module 1: Learning Processes, Diploma in Youth Development Work. Commonwealth Youth Program, London, 2007. Commonwealth Secretariat, https://www.yumpu.com/en/document/read/27145644/module-1-learning-processes-diploma-in-youth-development-work.
- [40] C. Egle, A Guide to Facilitating Adult Learning, Rural Health Education Foundation, Deakin, Australia, 2007.
- [41] S. Ayaz, S. Anwar, M.H. Sial, Z. Hussain, Role of agricultural credit on production efficiency of farming sector in Pakistan—a data envelopment analysis, Pakistan Journal of Life and Social Sciences 9 (1) (2011) 38–44.
- [42] R.N. Patel, in: Rev (Ed.), Educational Evaluation: Theory and Practice, Himalaya Publishing House, Mumbai, 2010.
- [43] B.C. Reznich, S.L. Yelon, Learner Evaluation and Test Item Construction, Office of Medical Education Research and Development, College of Human Medicine, East Lansing, MI, 2011.
- [44] Michigan State University Polytechnic Institute, Guidelines for Test Design and Construction, 2015. Retrieved, https://homepages.rpi.edu/~verwyc/chap2tm. html. (Accessed 17 August 2016).
- [45] Rensselaer Polytechnic Institute, Guidelines for Test Design and Construction, 2015. Retrieved, https://homepages.rpi.edu/~verwyc/chap2tm.html. (Accessed 17 August 2016).
- [46] M. Devine, N. Yaghlian, Test Construction Manual, Center for Teaching Excellence. Cornell University, Ithaca, NY, 2015.
- [47] H. Alghamdi, L. Sun, Analysis of the fit of learning and management systems in higher education institutions: a case study from Saudi arabia, International Journal of Business and Economic Affairs 2 (4) (2017) 260–267.
- [48] J. Howe, Maryam jameelah and the affective economy of islamic revival, International Journal of Religion 3 (2) (2022) 85–98, https://doi.org/10.33182/ijor. v3i2 2286
- [49] A. Madsgaard, K. Røykenes, H. Smith-Strøm, S. Høyland, The affective component of learning in simulation-based education facilitators' strategies to establish psychological safety and accommodate nursing students' emotions, BMC Nurs. 21 (1) (2022) 91, https://doi.org/10.1186/s12912-022-00869-3.
- [50] S. Zach, H. Rosenblum, The affective domain—a program to foster social-emotional orientation in novice physical education teachers, Int. J. Environ. Res. Publ. Health 18 (14) (2021) 7434, https://doi.org/10.3390/ijerph18147434.
- [51] R. Wu, Z. Yu, Exploring the effects of achievement emotions on online learning outcomes: a systematic review, Front. Psychol. 13 (2022), https://doi.org/10.3389/fpsyg.2022.977931. Article 977931.
- [52] N.Z. Khidzir, K.A.M. Daud, M.A.H. Ibrahim, The relationship among students' domain of learning development implementing virtual learning in higher learning institutions, International Journal of Information and Education Technology 6 (6) (2016) 418–422, https://doi.org/10.7763/IJIET.2016.V6.702.
- [53] E.M. Ganyaupfu, Teaching methods and students' academic performance, International Journal of Humanities and Social Science Invention 2 (9) (2013) 29–35. http://www.ijhssi.org/papers/v2(9)/Version-1/G029112935.pdf.