

## Article

# Unravelling the Influence of Buddhist Liberal Arts Education on College Students' Self-Reflection

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**Abstract:** The purpose of this paper is to investigate the measurable impact of Buddhist liberal arts courses on college students' ability to engage in self-reflection. This study uses the data gathered to establish, through statistical analysis, any correlations between two variables—Buddhist liberal arts as courses as the independent variable and self-reflection intelligence as the continuous dependent variable. First, the following results of the study show that the mean of the four self-reflection sub-categories for the students who found that the courses were helpful was higher than that of the students who found that they were not helpful: self-awareness ( $4.10 \pm 0.49 > 3.90 \pm 0.87$ ), self-design ( $3.84 \pm 0.66 > 3.40 \pm 0.97$ ), self-regulation ( $4.01 \pm 0.04 > 3.48 \pm 0.18$ ), and self-examination ( $4.21 \pm 0.03 > 3.94 \pm 0.15$ ), respectively. Second, the mean of the four self-reflection sub-categories for students who experienced a positive change of their perception in the courses was higher than that of students who experienced a negative change, as follows: self-awareness ( $4.08 \pm 0.50 > 3.75 \pm 0.82$ ), self-design ( $3.84 \pm 0.68 > 3.51 \pm 0.93$ ), self-regulation ( $4.00 \pm 0.59 > 3.56 \pm 0.67$ ), and self-examination ( $4.17 \pm 0.49 > 4.04 \pm 0.73$ ), respectively. This study illuminates the role of Buddhist-related liberal arts courses in higher education, specifically in fostering students' self-reflection skills. It offers valuable insights into educational practices aimed at enhancing self-reflection levels.

**Keywords:** Buddhist liberal arts education; self-reflection; self-awareness; self-design; self-regulation; self-examination; Buddhism and humanity; self and meditation



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## 1. Introduction

This paper presents a study on self-reflection among students within the context of Buddhist liberal arts courses. Liberal arts education at the university level offers a unique opportunity for students to cultivate critical thinking and the ability to explore diverse perspectives. It empowers them to express themselves persuasively in writing, hone their analytical precision, and foster higher-order reasoning. Despite the ongoing debate over the value and effectiveness of the liberal arts curriculum (Logan and Curry 2015), the overarching objective of liberal arts education aligns directly with equipping college students with versatile skills and thought processes that can seamlessly guide them in any direction they choose for their future endeavors. Learning theorists assert that reflection lies at the heart of learning and professional growth, serving as a catalyst for transformation and empowerment within this educational framework (Hilden and Tikkamäki 2013). Self-reflection is recognized as a burgeoning competency that modern society increasingly demands of its youth, emphasizing the necessity for current educational training to prepare them for the future (Brownhill 2021).

Self-reflection is described as taking time to think, contemplate, examine, and review yourself as part of increasing your self-awareness (Neale 2019). By reflecting on a puzzling experience, learners integrate their new experiences with their prior knowledge about the world, or they establish goals for what they need to learn in order to make sense out of what

they observe (Jonassen et al. 2008). Self-reflection is also understood as self-observation and the report[ing] of one's thoughts, desires, and feelings (Gläser-Zikuda 2012). In short, self-reflection is a conscious mental process that relies on thinking, reasoning, and examining one's own thoughts, feelings, and ideas. Contrary to self-deprecation or self-condemnation, self-reflection empowers students to foster growth by engaging in positive critical thinking toward oneself and steering clear of detrimental self-judgment. The importance of self-reflection is recognized as fostering human development and personal transformation and, ultimately, a better society (Ardelt and Grunwald 2018).

There is limited research available on Buddhist liberal arts education, with existing studies predominantly emphasizing the necessity for these courses (Son 2020) and strategies for enhancing their quality (An 2023). A recent study outlined a direction for Buddhist liberal arts courses, advocating for practical and pragmatic teaching methods, as well as the cultivation of a self-directed and spontaneous learning environment (Chang and Go 2024). Therefore, this study proposes self-reflection as a key trait for students to cultivate in the Buddhist liberal arts classes and argues for adapting the curriculum and operation of Buddhist liberal arts programs accordingly. In today's vulnerable mental health landscape for young adults, self-reflection is recognized as a crucial skill for fostering awareness, managing stress, regulating emotions, and promoting self-development.

D University, a state-accredited institution affiliated with Buddhism, provides a comprehensive array of liberal arts classes categorized into 10 specific themes. The themes include Exploring College Life, Self-reflection, 21st Century Citizen, World Masterpieces Seminar, and Future Risk Society and Safety.<sup>1</sup> Among them, self-reflection is a fundamental theme explored in the two courses of Self and Meditation, as well as Buddhism and Humanity. While teaching meditation and basic Buddhist doctrines, these courses are designed for students to engage in the understanding and facilitating of self-reflection as an end-goal. Identifying the learning goal is the first step in the backward design of learning (Wiggins and McTighe 2005). Backward design in pedagogy encourages the teachers to first identify the goals, then determine what would demonstrate that students had attained such goals and finally, plan the course activities to facilitate such learning among the students (McGuire 2021). This article scrutinizes students' perspectives and responses regarding the alignment of the two courses with the aim of self-reflection objectives. Moreover, it addresses the ways in which Buddhist liberal arts courses can effectively attend to the psychological and spiritual needs of students in the contemporary era. This study also serves as an initial exploration laying the groundwork for future research and analysis of variations in students' self-reflection scales before and after the course.

## 2. Background

Continuous consideration is imperative regarding what and how to teach and learn in university education, as it remains a crucial educational discourse. In light of the burgeoning fourth industrial revolution and the imminent transition to a post-human society, there is an urgent call for a profound reevaluation of traditional university education. The 21st century, marked by escalating social volatility, pervasive interdisciplinary overlaps, rapid evolution, and perpetual flux, necessitates a comprehensive reassessment of the framework for human resource cultivation (Paek 2020). The Korea National Institute for General Education (KONIGE), since its establishment in 2011, has defined basic liberal arts education as "universal education" and states that it "fosters qualities that enable students to autonomously lead the cultural life of the community through critical and creative thinking and smooth and open communication, especially in the new era of the global information society" (KONIGE 2016). And at the center of this liberal arts education is a core competency-based education. The discourse surrounding core competencies in Korean higher education was directly catalyzed by the government's university financial support program initiated in the 2000s (Paek 2020). The paradigm shift in higher education towards competency-based education underscores the necessity for a liberal arts education rooted in competency. This encompasses not only the acquisition of knowledge and skills but also

delves into intrinsic elements such as motivational attitudes, values, and the capacity to navigate life's diverse facets with dignity and decency (Michel 2001; Jin et al. 2011).

D University, with its founding philosophy as Buddhism, presents the following five core competencies: creative convergence competency, digital competency, self-development competency, communication and collaboration competency, and global citizenship competency.<sup>2</sup> Of the five core competencies, the self-development competency refers to the ability to continuously seek and hone knowledge and wisdom, act with strong passion and determination, and develop oneself, specifically in goal setting and commitment, self-directed learning, self-reflection and management, and professionalism and work ethic. Courses such as Buddhism and Humanity, Self and Meditation I, and Self and Meditation II are specifically crafted to foster self-development competencies aimed at cultivating self-reflection.

Buddhism and Humanity, Self and Meditation I, and Self and Meditation II have been offered every semester since 1996, serving as mandatory liberal arts courses for graduation at D University. Typically undertaken during the initial two years of study, these courses provide foundational insights into self-awareness and meditation practices. Instructors for the Buddhism and Humanity course comprise both lay people and fully ordained Buddhist monks or nuns who hold a Ph.D., and the instructors for the Self and Meditation I and II courses consist exclusively of fully ordained Buddhist monks or nuns who have completed a doctoral program or higher.

The course outlines are as follows.<sup>3</sup> Buddhism and Humanity aims to cultivate a comprehensive understanding of the world, life, and values through an exploration of the life and teachings of the Buddha. It provides an opportunity to explore the principles of creating an ideal world characterized by peace and happiness, guided by wisdom and compassion. Self and Meditation I and II are designed to nurture a truthful and innovative mindset through the practice of meditation and introspective understanding. Students will delve into the fundamentals of meditation, including posture and breathing techniques, while learning a variety of meditation methods, from traditional to modern.

The syllabus and teaching materials for Buddhism and Humanity were unified in 2021 (Lee and Kim 2021), and Self and Meditation I and II in 2019 (An and Kim 2021). As of the fall semester of 2023, there are 36 Buddhism and Humanity courses being offered, along with 72 courses for Self and Meditation I and II combined. The syllabus for Buddhism and Humanity covers a wide range of topics, including world religions, dependent origination, the Four Noble Truths, the Three Marks of Existence, bodhisattvas and the Six Paramitas (Perfections), the spread of Buddhism, the understanding of different Buddhist traditions, and meditation. Self and Meditation I and II introduce diverse meditation practices from traditional to modern and help students become familiar with meditation and incorporate it into their daily lives. In essence, Buddhism and Humanity provides a theoretical exploration grounded in Buddhist doctrine, whereas Self and Meditation I and II focus primarily on practical meditation techniques and experiences.

When viewed through the lens of self-reflection competencies, D University's curriculum, with its Buddhist liberal arts courses, serves to educate students on self-reflection by fostering an understanding of oneself and the capacity to craft and navigate one's life effectively. Through a variety of meditation techniques rooted in Buddhist principles, the university encourages students to explore both themselves and society, drawing from Buddhist world views, human perspectives, and values. Ultimately, these practices aim to imbue students with the ability to embody these insights into their daily lives.

### 3. Materials and Method

#### 3.1. Study Design

Data collection for the general survey and Buddhist liberal arts classes and self-reflection questionnaires was conducted over 7 days between 12 June 2023 and 19 June 2023 for 320 undergraduate students at D University, Seoul. Students who participated in the study have completed one or more of the following courses: Buddhism and Humanity, Self

and Meditation I, and Self and Meditation II. They were selected regardless of their major or grade level. General survey questions were employed to identify the characteristics of the participants. A self-reflection scale was administered, collected, and analyzed. This study obtained IRB approval (DU-IRB-202305-28) from D University. Participants were informed about the purpose and content of the study, and the data were collected upon their consent to voluntary participation without cost nor risk. Participants were informed that the data collected by them were to be used only for the purpose of the study, and that there was no disadvantage due to cancellation. Participants were also informed that the collected data would be stored for three years and then discarded.

### 3.2. Participants

Out of the 300 undergraduate students surveyed at D University, 278 responses were analyzed for this study. D University, established 1906, is a private institution with 78 departments and 13,416 students as of 2023.<sup>4</sup> Among the liberal arts courses offered, Buddhism and Humanity and Self and Meditation I are prerequisite courses and Self and Meditation II is an elective. Study participants would have completed one or more of these courses, and their major and religious affiliation were not taken into account. To ascertain the general characteristics of the study participants, two questions were asked, one concerning their grade level and the other regarding the specific class or classes they had completed among the three available options. Regardless of the participant's religious affiliation, we included a question to inquire about their status of religious activity. This enables us to examine the percentage of religiously active students in the post-religious generation era, comparing it to the findings of a recent survey in which 62.9% respondents indicated having no religious affiliation ([Pastoral Data Institute 2023](#)).<sup>5</sup>

### 3.3. Measurements

#### 3.3.1. Buddhist Liberal Arts Courses and Self-Reflection

The study participants were given four questions to evaluate their general opinions on the Buddhist liberal arts courses. First, the students were queried about the extent to which they found the Buddhist liberal arts courses beneficial, if they were indeed helpful. Second, they were asked about the changes in their perspectives on the Buddhist liberal arts courses before and after taking the course, to assess the extent of change in their opinions. Third, they were asked to identify the most beneficial learning points in the Buddhist liberal arts courses, selecting from options such as the following: (1) understanding Buddhism; (2) embodying self-reflection; (3) practicing meditation; (4) acquiring knowledge of liberal arts education; or (5) other. Lastly, they were prompted to choose the most beneficial topic covered in the lessons, selecting from options including the following: (1) the Four Noble Truths and the Eightfold Path; (2) dependent arising; (3) impermanence and selflessness; (4) meditation; or (5) other.

Subsequent to the overall assessments on the Buddhist liberal arts courses, 9 inquiries were administered to explore the correlation between participation in these classes and the cultivation of self-reflection. The survey included inquiries such as whether participants revisited and implemented their learning beyond the classroom in their daily lives. Furthermore, they were queried about the circumstances in which such revisits occurred, choosing from options such as the following: (1) when alone; (2) when contemplating the future; (3) during times of stress or emotional distress; (4) amidst relational challenges; or (5) other. More questions explored the impact of the courses on participants' thinking, attitude, and overall life. Participants were also asked to identify the most crucial element of self-reflection and specify which aspect among self-awareness, self-design, self-regulation, and self-examination was most significantly influenced by the courses. Lastly, participants were asked to estimate the amount of time dedicated to self-reflection each day.

### 3.3.2. Self-Reflection

For a measure of self-reflection, the Korean Self-Reflective Insight Scale (K-SRIS) was employed. Components of self-reflective intelligence derived from the literature and measurement instruments include emotion awareness, competency awareness, emotion regulation, emotion utilization, meta-cognition, self-efficacy, impulse control, goal setting (future planning), self-evaluation, etc. The K-SRIS employed in this study was developed by combining and modifying elements from different instruments. It underwent a development and validation process to ensure its appropriateness, validity, and reliability as a self-reflection measurement instrument (Ahn and Oh 2013). Inappropriate questions were eliminated, possibly to improve the relevance of the instrument. For validation, explanatory factor analysis (EFA) and confirmatory factor analysis (CFA) were employed. For better reliability, Cronbach's alpha was used. Furthermore, the question–total score correlation was also employed to assess how individual questions correlate with the overall score, providing insights into the internal consistency and reliability of the instrument. As a result, the K-SRIS of this study consists of four sub-categories and 35 questions.

The K-SRIS is divided into four sub-categories, namely self-awareness, self-design, self-regulation, and self-examination. The category of self-awareness likely assesses the degree to which individuals are aware of their thoughts, feelings, behaviors, and overall conditions. The category of self-design focuses on the ability to think about the meaning and purpose of one's life and to set goals, make plans, and organize actions to achieve desired outcomes. The category of self-regulation likely assesses the individual's ability to regulate and manage their emotions and behavior effectively. It involves strategies for coping with stress, handling negative emotions, and maintaining emotional balance. The category of self-examination involves reflecting on one's own thoughts, actions, and experiences. It includes self-evaluation and the ability to learn from one's own experiences.

The category of self-awareness consists of nine questions. These questions are designed to gauge participants' self-awareness by assessing the following factors: (1) awareness of sudden emotional or depressive shifts without apparent cause, (2) proficiency in understanding their thoughts, (3) ability to identify the source of positive or negative feelings, (4) awareness of engaging in activities willingly or under compulsion, (5) recognition of their emotional states, (6) understanding of the functioning of their mind, (7) identification of triggers for their emotions, (8) proficiency in comprehending their own emotions, and (9) inclination to introspect in order to grasp the reasons underlying their current mental state.

The category of self-design consists of eight questions. These questions aim to assess the extent to which participants are capable of the following: (1) possess a sense of life purpose and direction, (2) perceive the alignment between the person they aspire to become and their future goals, (3) exhibit confidence in who they are and what they want to do with their life, (4) have short-term goals for the future, (5) articulate specific goals to attain their aspirations, (6) contemplate long-term objectives for the future, (7) understand what they need to do to prepare for future or job, and (8) are able to rekindle motivation by reminding themselves of the purpose behind their efforts, particularly during moments of uncertainty about the trajectory of their life or studies.

The category of self-regulation consists of twelve questions. These questions aim to evaluate the extent to which study participants perform the following: (1) exhibit the ability to calm themselves when excessively excited, (2) exercise control over their anger, (3) recognize and promptly release anger, (4) maintain composure in anger, considering others' moods, (5) make conscious choices between anger and patience based on the situation, especially when upset by someone, (6) regulate their thoughts and emotions to align with the context, (7) remain composed when addressing problems, (8) demonstrate patience by allowing others to complete their stories uninterrupted, (9) refrain from getting upset if accidentally harmed, (10) work toward the collective good even in situations they may not favor, (11) employ personalized strategies for coping with depression, and (12) actively strive to improve their emotional well-being.

The category of self-examination consists of six questions. These questions are designed to assess the degree to which study participants engage in the following: (1) frequently reflect on their life journey in the face of failure, (2) contemplate their actions when confronted with adversity, (3) revisit past behaviors, lifestyle, actions, and words, especially when they've caused harm to others, (4) introspect during moments of doubt in their daily lives, questioning if they are on the right path, (5) engage in self-reflection to discern their own contributions when confronted with hurtful words from others, and (6) scrutinize the appropriateness of their behavior when they make mistakes in their interactions with others.

Each item is rated on a 5-point Likert scale ranging from "not at all" (1 point) to "strongly so" (5 points). A higher score indicates a higher level of self-reflective insight. However, to analyze the relevance of the Buddhist liberal arts courses to students' self-reflection, the answers were grouped into three groups, namely positive, neutral, and negative.

### 3.4. Statistical Analysis

Frequency analysis was employed to assess both the general characteristics of the study participants and their perspectives regarding Buddhist liberal arts classes in relation to self-reflection. Continuous variables were summarized using means, SDs, medians, and ranges. Chi-square was used to determine if there was a difference in specific help based on taking different courses. To explore the variations in the variables influenced by the involvement with Buddhist liberal arts classes, ANOVA—an analytical method employed when three or more groups exhibit discrepancies in their means on a dependent variable—was employed. Subsequently, post hoc tests were conducted utilizing Scheffe's test to delve deeper into the distinctions in means among the groups through pairwise comparisons.

To examine the validity of the survey results of the self-reflection questionnaire, all 35 questions were reviewed for content validity and exploratory factor analysis (EFA). Content validity was examined by four liberal arts professors to ensure that the survey questions were adequately measuring the concepts. In addition, an EFA was conducted, and the factor extraction model using the varimax method was conducted using the principal component analysis. For the analysis, factor loading of 0.3 or higher and factor explanatory power of 0.5 or higher were used as criteria (Hair et al. 1998). Next, Cronbach's value was used to verify the reliability, which is the internal consistency of the questions, and the results showed that the value was above 0.8 for all factors, which secured high reliability. Statistical significance was set at  $p < 0.05$ .

## 4. Study Results

### 4.1. General Characteristics

General characteristics of the participants were summarized using frequency analysis. Out of a total of 278 students, the breakdown by grade level participation is as follows: 176 (63.3%) in first grade, 31 (11.2%) in second grade, 41 (14.7%) in third grade, and 30 (10.8%) in fourth grade. Looking at the number of Buddhist liberal arts courses taken by these students, 115 (41.4%) took only one course, including 47 (16.9%) of Buddhism and Humanity, 67 (24.1%) of Self and Meditation I, and 1 (0.4%) of Self and Meditation II; 88 (31.7%) took two courses, including 83 (29.9%) of Buddhism and Humanity and Self and Meditation and 5 (1.8%) of Self and Meditation I and Self and Meditation II; and 75 (27%) took all three courses. And the survey reports that 73 students (26.3%) were religiously active whereas 205 (73.6%) were not.

As for what students thought of the courses, 197 (70.9%) answered helpful, 67 (24.1%) neutral, and 14 (5.0%) not helpful. Furthermore, 207 (74.5%) students said it positively changed the way they think about liberal arts, 57 (20.5%) stayed the same, and 14 (5%) changed negatively. Given the similar number of students who answered that they found the course helpful and those who answered that their perceptions of the course changed positively after taking the course, we can infer that students who became more positive

about the course may have found it helpful after taking it. There were no significant differences in the mean values of four sub-categories of self-reflection by grade level and religious activity. However, students who took two courses had higher mean values in all four sub-categories than students who took just one course. And more importantly, students who completed all three courses demonstrated the highest mean values across all four sub-categories of the self-reflection scale (see Table 1).

**Table 1.** Sub-categories of self-reflection by general characteristics.

Variables		No (%)	Mean Value			
			Self-Awareness	Self-Planning	Self-Regulation	Self-Examination
Grade Level	1st Year	176 (63.3%)	35.68	29.35	46.40	24.76
	2nd Year	31 (11.2%)	35.48	30.80	47.42	24.41
	3rd Year	41 (14.7%)	36.21	28.80	47.14	24.23
	4th Year	30 (10.8%)	37.00	30.61	47.51	24.35
No. of Courses Completed	One	115 (41.4%)	35.57	29.84	46.08	24.66
	Two	88 (31.7%)	35.77	29.87	46.44	24.78
	Three	75 (27.0%)	37.08	31.53	48.78	25.32
Religion	Active	75 (27.0%)	36.69	30.30	46.01	24.52
	Not active	203 (73.0%)	35.74	29.28	47.00	24.96

The specific area that was most beneficial learning in the courses was embodying self-reflection (34.9%), practicing meditation (26.6%), understanding Buddhism (24.8%), acquiring knowledge on liberal arts education (12.9%), and others (0.7%), respectively. The most beneficial aspects of self-reflection, based on responses regarding the four sub-categories and in order of effectiveness, from the Buddhist liberal arts courses are as follows: self-awareness ( $n = 105$ , 37.8%), self-regulation ( $n = 98$ , 35.3%), self-examination ( $n = 47$ , 16.9%), and self-design ( $n = 28$ , 10%). When asked which of the four sub-components of self-reflection is most important, 143 (51.4%) students said self-awareness. We found that self-awareness is the most important factor in self-reflection for students and the area that the courses have helped them the most. Concerning the specific topics covered by the courses that had helped them the most, 176 students (63.3%) answered meditation, 50 (18%) the Four Noble Truths and Eightfold Path, 26 (9.4%) impermanence and no-self, 17 (6.1%) dependent arising, and 9 (3.2%) others, respectively.

#### 4.2. Validity and Reliability of Survey Questions

After reviewing the validity and reliability of the 35 questions used in the survey and excluding the ones with low factor loading, 7 out of 9 questions on self-awareness, all 8 on self-design, 7 out of 12 on self-regulation, and all 6 on self-examination were used for the study analysis. The validity and reliability results of 28 questions are shown in Table 2.

**Table 2.** Validity and reliability of survey questions used for analysis.

Sub-Category	No	Question	Factor Loading	Community	Elgen-Value	Variance Explained	Cronbach $\alpha$
Self-awareness	2	I can recognize my thoughts well	0.649	0.514	4.052	31.128	0.856
	3	I can recognize when I'm feeling good or bad and what's causing it.	0.639	0.437			
	4	I aware that I act willingly or under compulsion	0.595	0.405			
	5	I can recognize my emotional states	0.732	0.672			
	6	I know how my mind works.	0.788	0.676			
	7	I can recognize when something triggers an emotion in me.	0.691	0.5			
	8	I am good at understanding my own emotions.	0.735	0.603			
	Self-design	1	I have a purpose and direction in my life.	0.826			
2		I have a clear belief about the kind of person I want to become in the future.	0.792	0.654			
3		I have confidence in who I am and what I want to do with my life.	0.815	0.719			
4		I have short-term goals for the future.	0.613	0.459			
5		I can articulate specific goals to attain my aspirations.	0.644	0.529			
6		I think about the long-term goals in life that I want to accomplish in the future.	0.744	0.642			
7		I know what I need to prepare for my future self or job.	0.761	0.634			
8		When I have doubts about whether my life is on the right track, I remind myself why I am doing this (studying).	0.552	0.48			
Self-regulation	1	I can calm myself down when I'm excited.	0.764	0.648	3.958	45.265	0.874
	2	I can control my anger when I'm angry.	0.84	0.75			
	3	I recognize when I'm angry and find ways to quickly release it.	0.625	0.517			
	4	Even when I get very angry, I consider the feelings of others and restrain myself.	0.682	0.509			
	5	I can choose for myself whether to be angry or tolerant when someone offends me, depending on the situation.	0.702	0.592			
	6	I am able to control and regulate my thoughts and emotions to fit the situation.	0.721	0.59			
	7	I stay calm when troubleshooting.	0.626	0.518			



Table 2. Cont.

Sub-Category	No	Question	Factor Loading	Community	Elgen-Value	Variance Explained	Cronbach $\alpha$
Self-examination	1	When I experience failure, I often look back at my life so far.	0.661	0.519	3.33	57.157	0.815
	2	When things go wrong, I think about why I acted the way I did.	0.693	0.562			
	3	When I have caused harm to others, I revisit past behaviors, lifestyles, actions, and words.	0.715	0.564			
	4	In the midst of the daily hustle and bustle, whenever I feel a sense of unease, I pause and reflect, questioning myself, 'Am I living well?	0.676	0.5			
	5	When someone says hurtful words to me, I reflect on what I might have done wrong to receive such words, revisiting past events.	0.724	0.541			
	6	When I make a mistake with someone else, I examine whether I did the right thing.	0.674	0.556			

### 4.3. Buddhist Liberal Arts Courses and Self-Reflection

To ascertain the effectiveness of Buddhist liberal arts courses in fostering self-reflection, this study examined the correlation between students’ assessment of these courses and their level of self-reflection intelligence. In order to assess the causal association between the course experience as the independent variable and each outcome (or continuous dependent) variable, ANOVA analyses were conducted. Individuals who positively evaluated the effectiveness of Buddhist liberal arts courses are likely to exhibit higher levels of self-reflection compared to those who provided negative assessments. In addition, individuals’ levels of self-reflection would be higher when their perception of the Buddhist liberal arts courses shifts positively after taking the courses than experiencing a negative change.

The analysis of variance results for the four sub-categories of self-reflection concerning the two independent variables—participants’ views on the helpfulness of Buddhist liberal arts courses and the change in perception before and after taking the courses—are shown in Tables 3 and 4 below.

**Table 3.** Found the course(s) helpful and self-reflection.

Subordination Variable	Independent Variable (Found the Course Helpful)	M ± SD	t or F/p	Scheffe
Self-awareness	Negative(c)	3.90 ± 0.87	8.84/ 0.000 ***	a > c
	Neutral(b)	3.79 ± 0.57		
	Positive(a)	4.10 ± 0.49		
Self-design	Negative(c)	3.40 ± 0.97	9.18/ 0.000 ***	a > c
	Neutral(b)	3.44 ± 0.79		
	Positive(a)	3.84 ± 0.66		
Self-regulation	Negative(c)	3.48 ± 0.18	7.88/ 0.000 ***	a > c
	Neutral(b)	3.77 ± 0.07		
	Positive(a)	4.01 ± 0.04		
Self-examination	Negative(c)	3.94 ± 0.15	4.80/ 0.009 ***	a > c
	Neutral(b)	4.01 ± 0.07		
	Positive(a)	4.21 ± 0.03		

\*\*\*  $p < 0.001$ .

**Table 4.** Change in perception before and after the course(s) and self-reflection.

Subordination Variable	Independent Variable (Change in Perception)	M ± SD	t or F/p	Scheffe
Self-awareness	Negative(c)	3.75 ± 0.82	5.53/ 0.004 ***	a > c
	Neutral(b)	3.87 ± 0.56		
	Positive(a)	4.08 ± 0.50		
Self-design	Negative(c)	3.51 ± 0.93	11.44 0.000 ***	a > c
	Neutral(b)	3.33 ± 0.72		
	Positive(a)	3.84 ± 0.68		
Self-regulation	Negative(c)	3.56 ± 0.67	6.82/ 0.001 ***	a > c
	Neutral(b)	3.77 ± 0.59		
	Positive(a)	4.00 ± 0.59		
Self-examination	Negative(c)	4.04 ± 0.73	0.75/ 0.471 ***	
	Neutral(b)	4.01 ± 0.50		
	Positive(a)	4.17 ± 0.49		

\*\*\*  $p < 0.001$ .

The analysis of variance results for the four sub-categories of self-reflection in relation to the independent variable of participants’ views on the helpfulness of Buddhist liberal arts courses had significant results as follows: self-awareness ( $4.10 \pm 0.49 > 3.90 \pm 0.87$ ), self-design ( $3.84 \pm 0.66 > 3.40 \pm 0.97$ ), self-regulation ( $4.01 \pm 0.04 > 3.48 \pm 0.18$ ), and self-

examination ( $4.21 \pm 0.03 > 3.94 \pm 0.15$ ). Moreover, in relation to the independent variable of change in perception, the three sub-categories of self-awareness ( $4.08 \pm 0.50 > 3.75 \pm 0.82$ ), self-design ( $3.84 \pm 0.68 > 3.51 \pm 0.93$ ), and self-regulation ( $4.00 \pm 0.59 > 3.56 \pm 0.67$ ) showed significance. The one of self-examination ( $4.17 \pm 0.49 > 4.04 \pm 0.73$ ) had a difference by a small margin, although positive was higher than neutral and negative. All 28 questions of the four sub-categories were analyzed for the probability value. Tables 5 and 6 below present the list of questions with the most notable *p*-value for further discussion.

**Table 5.** *p*-value of the notable questions in relation to a variable “found the course helpful”.

Subordination Variable	Found the Course(s) Helpful	Not Really No (%)	Average No (%)	Very Much No (%)	<i>p</i> -Value	
Self-awareness		4. I am aware that I act willingly or under compulsion				
	negative	1 (7.1%)	2 (14.3%)	11 (78.6%)	0.0054 **	
	neutral	1 (1.5%)	18 (26.9%)	48 (71.6%)		
	positive	5 (2.5%)	18 (9.1%)	174 (88.3%)		
			5. I can recognize my emotional states			
		negative	2 (14.3%)	2 (14.3%)	10 (71.4%)	<0.0001 ***
		neutral	1 (1.5%)	20 (29.9%)	46 (68.7%)	
	positive	0 (0.0%)	15 (7.6%)	182 (92.4%)		
			6. I know how my mind works.			
		negative	2 (14.3%)	3 (21.4%)	9 (64.3%)	0.0015 **
		neutral	5 (7.5%)	28 (41.8%)	34 (50.7%)	
	positive	8 (4.1%)	39 (19.8%)	150 (76.1%)		
		7. I can recognize when something triggers an emotion in me.				
	negative	1 (7.1%)	3 (21.4%)	10 (71.4%)	0.0001 ***	
	neutral	3 (4.5%)	24 (35.8%)	40 (59.7%)		
positive	3 (1.5%)	27 (13.7%)	167 (84.8%)			
Self-design		1. I have a purpose and direction in my life.				
	negative	3 (21.4%)	6 (42.9%)	5 (35.7%)	0.0271 *	
	neutral	8 (11.9%)	24 (35.8%)	35 (52.2%)		
	positive	15 (7.6%)	47 (23.9%)	135 (68.5%)		
			3. I have confidence in who I am and what I want to do with my life.			
		negative	7 (50.0%)	1 (7.1%)	6 (42.9%)	0.0012 **
		neutral	19 (28.4%)	27 (40.3%)	21 (31.3%)	
	positive	39 (19.8%)	50 (25.4%)	108 (54.8%)		
			4. I have short-term goals for the future.			
		negative	2 (14.3%)	2 (14.3%)	10 (71.4%)	0.0020 **
		neutral	9 (13.4%)	15 (22.4%)	43 (64.2%)	
	positive	9 (4.6%)	36 (18.3%)	152 (77.1%)		
		6. I think about the long-term goals in life that I want to accomplish in the future.				
	negative	3 (21.4%)	3 (21.4%)	8 (57.1%)	0.0357	
	neutral	10 (14.9%)	19 (28.4%)	38 (56.7%)		
positive	14 (7.1%)	36 (18.3%)	147 (74.6%)			
		7. I know what I need to prepare for my future self or job.				
	negative	4 (28.6%)	5 (35.7%)	5 (35.7%)	0.0005 ***	
	neutral	10 (14.9%)	22 (32.8%)	35 (52.2%)		
positive	15 (7.6)	34 (17.3%)	148 (75.1%)			
		8. When I have doubts about whether my life is on the right track, I remind myself why I am doing this (studying).				
	negative	2 (14.3%)	2 (14.3%)	10 (71.4%)	0.0020 **	
	neutral	9 (13.4%)	24 (35.8%)	34 (50.7%)		
positive	9 (4.6%)	39 (19.8%)	149 (75.6%)			

Table 5. Cont.

Subordination Variable	Found the Course(s) Helpful	Not Really No (%)	Average No (%)	Very Much No (%)	p-Value
Self-regulation		1. I can calm myself down when I'm excited.			
	negative	6 (42.9%)	4 (28.6%)	4 (28.6%)	<0.0001 ***
	neutral	3 (4.5%)	26 (38.8%)	38 (56.7%)	
	positive	10 (5.1%)	42 (21.3%)	145 (73.6%)	
		2. I can control my anger when I'm angry.			
	negative	1 (7.1%)	7 (5.0%)	6 (42.9%)	0.0129 *
	neutral	2 (3.0%)	25 (37.3%)	40 (59.7%)	
	positive	9 (4.6%)	40 (20.3%)	148 (75.1%)	
		5. I can choose for myself whether to be angry or tolerant when someone offends me, depending on the situation.			
	negative	2 (14.3%)	1 (7.1%)	11 (78.6%)	0.0096 **
	neutral	2 (3.0%)	13 (19.4%)	52 (77.6%)	
	positive	5 (2.5%)	15 (7.6%)	177 (89.8%)	
	6. I am able to control and regulate my thoughts and emotions to fit the situation.				
negative	0 (0.0%)	5 (35.7%)	9 (64.3%)	0.0155 *	
neutral	3 (4.5%)	19 (28.4%)	45 (67.2%)		
positive	11 (5.6%)	25 (12.7%)	161 (81.7%)		
	7. I stay calm when troubleshooting.				
negative	3 (21.4%)	3 (21.4%)	8 (57.1%)	0.0003 ***	
neutral	4 (6.0%)	24 (35.8%)	39 (58.2%)		
positive	12 (6.1%)	27 (13.7%)	158 (80.2%)		
Self-examination		1. When I experience failure, I often look back at my life so far.			
	negative	3 (21.4%)	2 (14.3%)	9 (64.3%)	0.0112 *
	neutral	6 (9.0%)	19 (28.4%)	42 (62.7%)	
	positive	7 (3.6%)	37 (18.8%)	153 (77.7%)	
	6. When I make a mistake with someone else, I examine whether I did the right thing.				
negative	1 (7.1%)	2 (14.3%)	11 (78.6%)	0.0073 **	
neutral	0 (0.0%)	6 (9.0%)	61 (91.0%)		
positive	1 (0.5%)	7 (3.6%)	189 (95.9%)		

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ .

Table 6. p-value of the notable questions in relation to a variable, change in perception.

Subordination Variable	Found the Course(s) Helpful	Not Really No (%)	Average No (%)	Very Much No (%)	p-Value
Self-awareness		4. I am aware that I act willingly or under compulsion			
	negative	2 (10.5%)	5 (26.3%)	12 (63.2%)	0.0444 *
	neutral	1 (1.9%)	9 (17.3%)	42 (80.8%)	
	positive	4 (1.9%)	24 (11.6%)	179 (86.5%)	
		5. I can recognize my emotional states			
	negative	2 (10.5%)	2 (26.3%)	12 (63.2%)	<0.0001 ***
	neutral	1 (1.9%)	8 (15.4%)	43 (82.7%)	
	positive	0 (0.0%)	24 (11.6%)	183(88.4%)	
		6. I know how my mind works.			
negative	1 (5.3%)	8 (42.1%)	10 (52.6%)	0.0013 **	
neutral	8 (15.4%)	15 (28.8%)	29 (55.8%)		
positive	6 (2.9%)	47 (22.7%)	154 (74.4%)		

Table 6. Cont.

Subordination Variable	Found the Course(s) Helpful	Not Really No (%)	Average No (%)	Very Much No (%)	p-Value	
Self-design	3. I have confidence in who I am and what I want to do with my life.					
	negative	7 (36.8%)	4 (21.1%)	8 (42.1%)	0.0073 **	
	neutral	19 (36.5%)	18 (34.6%)	15 (28.8%)		
	positive	39 (18.8%)	56 (27.7%)	112 (54.1%)		
	Self-design	5. I can articulate specific goals to attain my aspirations.				
		negative	3 (15.8%)	4 (21.1%)	12 (63.2%)	0.0031 **
		neutral	13 (25.0%)	23 (44.2%)	16 (30.8%)	
	positive	28(13.5%)	53 (25.6%)	126 (60.9%)		
	Self-design	7. I know what I need to prepare for my future self or job.				
		negative	4 (21.1%)	7 (36.8%)	8 (42.1%)	0.0001 **
		neutral	11 (21.1%)	17 (32.7%)	24 (46.2%)	
	positive	14 (6.8%)	37 (17.9%)	156 (75.4%)		
Self-design	8. When I have doubts about whether my life is on the right track, I remind myself why I am doing this (studying).					
	negative	3 (15.8%)	3 (15.8%)	13 (68.4%)	0.0062 **	
	neutral	9 (17.3%)	13 (25.0%)	30 (57.7%)		
positive	8 (3.9%)	49 (23.7%)	150 (72.5%)			
Self-regulation	1. I can calm myself down when I'm excited.					
	negative	5 (26.3%)	7 (36.8%)	7 (36.8%)	0.0013 **	
	neutral	4 (7.7%)	17 (32.7%)	31 (59.6%)		
	positive	10 (4.8%)	48 (23.2%)	149 (72%)		
	Self-regulation	2. I can control my anger when I'm angry.				
		negative	3 (15.8%)	8 (42.1%)	8 (42.1%)	0.0123 *
		neutral	2 (3.8%)	17 (32.7%)	33 (63.5%)	
	positive	7 (3.4%)	47 (22.7%)	153 (73.9%)		
	Self-regulation	6. I am able to control and regulate my thoughts and emotions to fit the situation.				
		negative	1 (5.3%)	8 (42.1%)	10 (52.6%)	0.0419 *
		neutral	2 (3.8%)	11 (21.2%)	39 (75.0%)	
	positive	11 (5.3%)	30 (14.5%)	166 (80.2%)		

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ .

#### 4.3.1. Found the Course(s) Helpful and Self-Reflection

The variances in scale responses to the self-reflection questions, contingent upon whether students found the course helpful or not, gives us a closer look into the relationship between Buddhist liberal arts courses and students' self-reflection. This was analyzed by comparing the percentage of positive answers to the self-reflection questions among students who found the course helpful to the percentage among students who found that the course was not helpful. In the first sub-category, self-awareness, questions 4, 5, 6, and 7 showed statistically meaningful results. Among the 197 students who found the course helpful, 174 students (88.3%) were aware of whether they acted willingly or under compulsion. Among the 14 who found that the course was not helpful, 11 (78.6%) were aware, indicating a statistically significant result ( $p = 0.0054$ ). Among the 197 students who answered helpful, 182 (92.4%) could recognize their emotional states, while among the 14 who answered not helpful, 10 (71.4%) could recognize their emotional states, indicating a statistically significant result ( $p = 0.0001$ ). Among the 197 who answered helpful, 150 (76.1%) knew how their mind worked, and among the 14 who answered not helpful, 9 (64.3%) knew, indicating a statistically significant result ( $p = 0.0015$ ). Among the 197 who answered helpful, 167 (84.8%) could recognize when something triggered an emotion in them, while among the 14 who answered not helpful, 10 (71.4%) could, indicating a statistically significant result ( $p = 0.0001$ ). To summarize the results of the analysis, the

higher the level of satisfaction that Buddhist liberal arts courses were helpful to oneself, the higher the self-awareness of one's action's (in)voluntariness (Q4), emotional state (Q5), functioning of mind (Q6), and emotion-triggered situations (Q7).

In the second sub-category, self-design, questions 1, 3, 4, 6, 7, and 8 showed statistically meaningful results. In question 1, among the 197 students who found the course helpful, 135 students (68.5%) had a purpose and direction in their life, and among the 14 who found it not helpful, 5 students (35.7%) had a purpose and direction, indicating a statistically significant result ( $p = 0.0271$ ). In question 3, among the 197 who answered helpful, 108 (54.8%) had confidence in who they were and what they wanted to do with their life, while among the 14 who answered not helpful, 6 (42.9%) had that confidence, indicating a statistically significant result ( $p = 0.0012$ ). In question 4, among the 197 who answered helpful, 152 (72.1%) had short-term goals for the future, and among the 14 who answered not helpful, 10 (71.4%) had short-term goals, indicating a statistically significant result ( $p = 0.0020$ ). In question 6, among the 197 who answered helpful, 147 (74.6%) thought about the long-term goals in life that they wanted to accomplish in the future. Among the 14 who answered not helpful, 8 (57.1%) had thought about the long-term goals as well, indicating a statistically significant result ( $p = 0.0357$ ). In question 7, among the 197 who answered helpful, 148 (75.1%) knew what they needed to prepare for their future self or job, while among the 14 who answered not helpful, 5 (35.7%) knew what they needed to prepare, indicating a statistically significant result ( $p = 0.0005$ ). In question 8, among the 197 who answered helpful, 149 (75.6%) reminded themselves why they were doing this (studying) when they had doubts about their life, while among the 14 who answered not helpful, 10 (71.4%) reminded themselves accordingly, indicating a statistically significant result ( $p = 0.0020$ ). In summary, the more helpful the students found the courses, the higher the awareness of their life purpose and direction (Q1), confidence in life (Q3), future short-term and long-term goals (Q4, Q6), preparation for future or job (Q7), and rekindling motivation (Q8).

In the third sub-category, self-regulation, questions 1, 2, 5, 6, and 7 showed statistically meaningful results. In question 1, among the 197 students who found the course helpful, 145 students (73.6%) could calm themselves down they were excited, and among the 14 who found it not helpful, 4 students (28.6%) could perform the same, indicating a statistically significant result ( $p = 0.0001$ ). In question 2, among the 197 who answered helpful, 148 (75.1%) could control their anger when they were angry, and among the 14 who answered not helpful, 6 (42.9%) were capable of the same, indicating a statistically significant result ( $p = 0.0129$ ). In question 5, among the 197 who answered helpful, 177 (89.8%) could choose for themselves whether to be angry or tolerant when someone offended them, depending on the situation, and among the 14 who answered not helpful, 11 (78.6%) could react in the same way, indicating a statistically significant result ( $p = 0.0096$ ). In question 6, among the 197 who answered helpful, 161 (81.7%) were able to control and regulate their thoughts and emotions to fit the situations, while among the 14 who answered not helpful, 9 (64.3%) were able to perform the same, indicating a statistically significant result ( $p = 0.0155$ ). In question 7, among the 197 who answered helpful, 153 (77.7%) stayed calm when troubleshooting, and among the 14 who answered not helpful, 9 (64.3%) stayed calm, indicating a statistically significant result ( $p = 0.0112$ ). Based on the analysis, the more helpful the students found the courses, the more they were able to calm themselves (Q1), control anger (Q2, Q5), regulate emotions (Q6), and address problems calmly (Q7).

In the fourth sub-category, self-examination, questions 1 and 6 showed statistically meaningful results. In question 1, among the 197 students who found the course helpful, 153 students (77.7%) looked back at their life when they experienced failure, and among the 14 who found the course not helpful, 9 students (64.3%) would react in the same manner, indicating a statistically significant result ( $p = 0.0112$ ). In question 6, among the 197 who answered helpful, 189 (95.9%) examined whether they did the right thing when they made a mistake with someone else, and among the 14 who answered not helpful, 11 (78.6%) would conduct themselves in the same manner, indicating a statistically significant result

( $p = 0.0073$ ). Through these results, it was confirmed that the more the students perceived the Buddhist liberal arts courses as helpful, the more they were aware of reflecting on their own lives when they faced failure, and of scrutinizing their behavior when they make mistakes for others.

#### 4.3.2. Before and after Perception Change and Self-Reflection

Again, the study looked at whether there was a correlation between students' perception changes about courses and their self-reflection. Specifically, it compared the percentage of positive answers to self-reflection questions among students who reported positive perception changes to those who reported negative changes. In the first sub-category, self-awareness, questions 4, 5, and 6 showed statistically meaningful results. In question 4, among the 207 students who reported positive perception changes, 179 students (86.5%) were aware of whether they acted willingly or under compulsion, and among the 19 who reported negative changes, 12 (36.2%) were aware, indicating a statistically significant result ( $p = 0.0444$ ). In question 5, among the 207 with positive changes, 183 (88.4%) could recognize their emotional states, and among the 19 with negative changes, 12 (63.2%) could, indicating a statistically significant result ( $p = 0.0001$ ). In question 6, among the 207 with positive changes, 154 (74.4%) knew how their mind worked, and among the 19 with negative changes, 10 (52.6%) knew, indicating a statistically significant result ( $p = 0.0013$ ). According to the analysis, as the perception of the Buddhist liberal arts courses changed more positively, the awareness of one's action's (in)voluntariness (Q4), emotional states (Q5), and functioning of one's mind (Q6) increased.

In the second sub-category, self-design, questions 3, 5, 7, and 8 showed statistically meaningful results. In question 3, among the 207 students who reported positive perception changes, 112 students (54.1%) had confidence in who they were and what they wanted to do with their life, and among the 19 who reported negative changes, 8 (42.1%) had the same confidence, indicating a statistically significant result ( $p = 0.0073$ ). In question 5, among the 207 with positive changes, 126 (60.9%) could articulate specific goals to attain their aspirations, and among the 19 with negative changes, 12 (63.2%) could articulate the same, indicating a statistically significant result ( $p = 0.0031$ ). In question 7, among the 207 with positive changes, 156 (75.4%) knew what they needed to prepare for their future self or job, and among the 19 with negative changes, 8 (42.1%) knew, indicating a statistically significant result ( $p = 0.0001$ ). In question 8, among the 207 with positive changes, 150 (72.5%) reminded themselves why they were doing this (studying) when they had doubts about their life, and among the 19 with negative changes, 13 (68.4%) would perform the same, indicating a statistically significant result ( $p = 0.0062$ ). To summarize the analysis, the positive change in perception of the Buddhist liberal arts courses was higher awareness of confidence in life (Q3), specific goals for aspirations (Q5), preparation for future or job (Q7), and rekindling motivation (Q8) compared to the negative.

In the third factor, sub-category, self-design, questions 1, 2, and 6 showed statistically meaningful results. In question 1, among the 207 students who reported positive perception changes, 149 students (72.0%) could calm themselves down when they were excited, and among the 19 who reported negative changes, 7 (36.8%) could, indicating a statistically significant result ( $p = 0.0013$ ). In question 2, among the 207 with positive changes, 153 (73.9%) could control their anger when they are angry, and among the 19 with negative changes, 8 (42.1%) could, indicating a statistically significant result ( $p = 0.0123$ ). In question 6, among the 207 with positive changes, 166 (80.2%) were able to control and regulate their thoughts and emotions to fit the situations, and among the 19 with negative changes, 10 (52.6%) were capable of the same, indicating a statistically significant result ( $p = 0.0419$ ). Based on the analysis, it was confirmed that as the perception of Buddhist liberal arts courses changed more positively, students were able to calm themselves (Q1), control anger (Q2), and regulate emotions (Q6).

## 5. Discussion

Out of the 278 students whose survey was analyzed, more than half ( $n = 163$ , 58.7%) had taken two or more Buddhist liberal arts courses. And the number of course enrolments correlated positively with the level of self-reflection. Majority of the students expressed positive views regarding the helpfulness of Buddhist liberal arts courses, with noticeable shifts in their perceptions before and after taking these courses. Statistical analysis revealed a significant correlation between the perceived helpfulness of Buddhist liberal arts courses and students' levels of self-reflection. Higher perceived helpfulness corresponded with higher means of all four sub-categories of self-reflection including emotional recognition, life goals, emotion regulation, and introspection, indicating a pivotal role of these courses in enhancing students' self-awareness and fostering growth in multiple dimensions. Moreover, the positive correlation between the changes in students' perceptions and their levels of self-awareness, self-planning, and self-regulation underscores the transformative impact of Buddhist liberal arts courses. When asked if the students revisited what they learned beyond the classroom, 210 students (75.5%) answered that they often or occasionally did when they were alone ( $n = 89$ , 32.5%) or in a stressful situation ( $n = 83$ , 29.6%) mostly. When asked if the courses changed their thinking, attitudes, or everyday life, 175 students (62.9%) answered positively. These findings underscore the significance of Buddhist liberal arts courses in facilitating holistic development and self-reflection among college students. And at the same time, they challenge us on how to approach the goal of Buddhist liberal arts education in terms of pedagogical possibilities within a framework of backward design (Wiggins and McTighe 2005). This study is both an examination of where the Buddhist liberal arts courses are headed currently and a reminder of the challenges ahead.

This study also has several limitations. First, despite the strong correlation between the Buddhist liberal arts courses and students' level of self-reflection, it would be beneficial to examine and compare pre- and post-course measures, a process currently underway. Second, by incorporating measures such as depression or resilience into the survey, it could yield more comprehensive data, enhancing our understanding of the correlation between the courses, self-reflection, and emotional indicators. This consideration stems from the recognition of the significant benefits associated with self-reflection, including reduced depression and increased resilience level. One study found that 58.8% of South Korean late adolescents, aged between 19 and 24, showed depressive symptoms as follows: mild 33.4%, moderately serious 21.3%, and serious 4.2% (Im and Hwang 2021). Third, the contents of the Buddhist liberal arts curriculum should address, not superficially but practically, how to promote understanding and practice self-reflection. It draws attention particularly when self-reflection is established as the primary objective of the course. This involves effectively integrating the curriculum's Buddhist knowledge content with self-reflection practices without encountering resistance, especially in the case of Buddhism and Humanity. One personal experience from a class teaching the Four Noble Truths—the truth of suffering, the truth of the cause of suffering, the truth of the end of suffering, and the truth of the path to the end of suffering—is as follows: I assigned students a task in which they were asked to select a personal challenge and to structure it according to the schema of the Four Noble Truths of diagnosis, cause, possibility of solution, and workaround. Students found this exercise highly beneficial as it prompted reflection on challenges, ranging from relational issues to career dilemmas to personal struggles. It is parallel to the direction of a liberal arts education such that education and training allow students to grow by facing and solving challenges rather than avoiding them. Furthermore, when meditation such as mindful self-compassion is taught in the course of Self and Meditation in order to move away from harsh self-criticism or hatred, it will bring us closer to the goal of Buddhist liberal arts education, which is self-reflection.

In contemporary society, college students navigate experiences shaped by various factors, including the educational system and societal pressures. Particularly in South Korea, students grapple with an education system heavily focused on standardized entrance exams, limiting opportunities for introspection on personal and societal values. Even in



college, challenges persist in exploring values amid concerns over employment prospects and acquiring specialized knowledge in majors (Son et al. 2013). Given the limited opportunities for introspection, self-reflection becomes crucial for students to understand their circumstances and plan strategically for the future. The collegiate phase represents a critical juncture where individuals transition into societal roles, necessitating profound contemplation on self-identity and life trajectories to realize their potential.

Liberal arts education emphasizes continuous self-development and adaptability, requiring an overhaul in curricula to prioritize critical thinking, creativity, ethical fortitude, environmental awareness, and scientific literacy. Buddhist liberal arts courses should address diverse issues such as evolving values, emphasizing pragmatic solutions, individualism, present-oriented values, acceptance of diverse lifestyles, and sensory gratification (Chang 2020).

## 6. Conclusions

This study examines the survey participants' perspectives on Buddhist liberal arts courses while also assessing their levels of self-reflection. It investigates whether students' positive evaluations of Buddhist liberal arts courses are related to their intelligence of self-reflection and, if so, which aspects are more prominent. A total of 74.5% of survey respondents answered that they changed the way they thought about Buddhist liberal arts courses before and after taking the course, and 70.9% said they found the course(s) helpful. In terms of the four sub-categories of self-reflection with the highest response rates, the order in which Buddhist liberal arts courses were most helpful is as follows: self-awareness, 37.8%; emotion-regulation, 35.3%; self-examination, 16.9%; and meaning of life, 10.1%, respectively. This is the same result as when asked which of the four sub-categories of self-reflection is most important to them, self-awareness had the highest response rate at 51.4%.

In line with backward design in pedagogy (McGuire 2021), we suggest that the purpose of the Buddhist liberal arts courses is not primarily focused on the transmission of Buddhist knowledge or the propagation of Buddhism. Rather, the emphasis lies on fostering students' understanding and practice of self-reflection. This is especially true for the younger generation in the contemporary post-religious era, where more than 80% are not actively engaged in religious practices and thus there arises a significant demographic known as the 'spiritual but not religious (Mercadante 2020) group. This group, while indifferent to religion, is often mentally vulnerable, faces a variety of psychological issues, and seeks spiritual growth. Consequently, for this generation of college students, the trajectory of liberal arts education intertwined with religion becomes a shared responsibility of educators and institutions.

Buddhism, through Pratītyasamutpāda's interdependence, prompts reflection on the human identity amidst rapid societal changes, aiding liberal arts education. In the digital age, fostering spaces for self-care and introspection is crucial, with Buddhist liberal arts courses contributing to reconfiguring perspectives on self and the world. D University's liberal arts department, known as Dharma College, integrates Buddhist pedagogical approaches, emphasizing life's interconnectedness and providing flexibility in expanding human identity. The transformative impact of Buddhist liberal arts courses on students' emotional intelligence, goal-setting abilities, and self-regulation skills should align with the overarching goals of general education, aiming to nurture holistic development.

This study represents an initial exploration into the correlation between Buddhist liberal arts courses and self-reflection among students. Future research avenues may include pre- and post-course comparisons, as well as comparisons with the self-esteem and self-reflection intelligence of students who opt for a more intensive meditation class, which is not mandatory but rather an optional component of liberal arts courses.

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**Data Availability Statement:** The datasets generated and/or analyzed during the current study are available from the corresponding author upon reasonable request.

**Conflicts of Interest:** The authors declare no conflicts of interest.

## Notes

- <sup>1</sup> <https://dharma.dongguk.edu/page/1016> (accessed on 29 September 2023).
- <sup>2</sup> <https://www.dongguk.edu/page/75#> (accessed on 29 September 2023); [https://www.dongguk.edu/resources/pdf/20210409\\_100648758\\_48491.pdf](https://www.dongguk.edu/resources/pdf/20210409_100648758_48491.pdf) (accessed on 29 September 2023).
- <sup>3</sup> Dongguk University Courses (<https://www.dongguk.edu/page/137>)—The Curriculum Guide for the Class of 2023. ([https://www.dongguk.edu/resources/pdf/curriculum/0.2023\\_course\\_catalog\\_curri\\_commentary.pdf](https://www.dongguk.edu/resources/pdf/curriculum/0.2023_course_catalog_curri_commentary.pdf) (accessed on 29 September 2023).
- <sup>4</sup> <https://www.academyinfo.go.kr/popup/pubinfo1690/list.do?schlId=0000100> (accessed on 29 September 2023).
- <sup>5</sup> [http://www.mhdata.or.kr/bbs/board.php?bo\\_table=gugnae&wr\\_id=108](http://www.mhdata.or.kr/bbs/board.php?bo_table=gugnae&wr_id=108) (accessed on 11 October 2023).

## References

- Ahn, Che Yun, and Mi Kyoung Oh. 2013. The development of a self-reflective intelligence scale for adults. *The Korean Journal of the Human Development* 20: 51–78.
- An, Hyo-gi, and Geun Hang Kim. 2021. Enhancing the Development of Buddhist Liberal Arts Education of Seon Practice at Buddhist-affiliated University: Focusing on core competency education of the Self and Meditation course. *Journal of Jogye Order Studies* 6: 147–84. Available online: <https://jonghak.dongguk.edu/article/journal/detail/183740?pageIndex=4&> (accessed on 29 September 2023).
- An, Hyo-gi. 2023. A Case Study of Seon Practice-based Liberal Arts Course-Focusing on the Effects of Mindfulness and Emotional Intelligence. *Korean Association for Buddhist Studies* 106: 303–37. [CrossRef]
- Ardelt, Monika, and Sabine Grunwald. 2018. The Importance of Self-Reflection and Awareness for Human Development in Hard Times. *Research in Human Development* 15: 1–13. [CrossRef]
- Brownhill, Simon. 2021. Asking more key questions of self-reflection. *Reflective Practice* 23: 57–67. [CrossRef]
- Chang, Mi Ran. 2020. The Humanistic Role of Interdisciplinary Liberal Education of Buddhism—Focusing on the course management of “The 4th Industrial Revolution, Life Changes, and Buddhist Humanity”. *Ratio et Oratio* 13: 129–54. [CrossRef]
- Chang, Mi Ran, and Eun Sun Go. 2024. Exploration of Improvements for the Operation of General Education Courses at the Buddhist Missionary University-Focusing on the Course ‘Buddhism and Humanity’. *Bulgyo Yongu* 60: 271–307.
- Gläser-Zikuda, Michaela. 2012. Self-reflecting methods of learning research. In *Encyclopaedia of the Sciences of Learning*. Edited by Norbert M. Seel. Berlin/Heidelberg: Springer. [CrossRef]
- Hair, Joseph F., Rolph E. Anderson, Ronald L. Tatham, and William C. Black. 1998. *Multivariate Data Analysis*, 5th ed. Englewood Cliffs: Prentice Hall.
- Hilden, Sanna, and Kati Tikkaäki. 2013. Reflective Practice as a Fuel for Organizational Learning. *Administrative Sciences* 3: 76–95. [CrossRef]
- Im, Hui Jin, and Yeo Jung Hwang. 2021. *A Study on the Policy Measures for the Protection of Youth’s Right to Health III: Late Adolescents, Research Report 21-R16*. Sejong: National Youth Policy Institute.
- Jin, Mi-Sug, Yu-Mi Sohn, and Hui-Jung Chu. 2011. A Study on Development Plan of K-CESA for College Education Assessment. *The Journal of Educational Administration* 2: 461–86.
- Jonassen, David H., Jane L. Howland, and Rose M. Marra. 2008. *Meaningful Learning with Technology*, 3rd ed. Englewood Cliffs: Prentice Hall.
- Liberal Arts Education Consulting Planning Committee. 2016. *The Standard Model for Liberal Arts College Education*. Seoul: Korea National Institute for General Education. Available online: [https://www.konige.kr/data/general\\_edu.php](https://www.konige.kr/data/general_edu.php) (accessed on 11 October 2023).

- Lee, Suk Hwan, and Eun Young Kim. 2021. A Study on Evangelizing College Students through the Buddhist Liberal Arts Education Buddhist-affiliated University: Focusing on the course Buddhism and Humanity at Dongguk University. *Journal of Jogye Order Studies* 6: 185–222. Available online: <https://jonghak.dongguk.edu/article/journal/detail/183741?pageIndex=4&> (accessed on 29 September 2023).
- Logan, Jerry, and Janel Curry. 2015. A Liberal Arts Education: Global Trends and Challenges. *Christian Higher Education* 14: 66–79. [CrossRef]
- McGuire, Beverley. 2021. Pedagogical Possibilities: A Review of Approaches to Undergraduate Teaching in Buddhist Studies. *Religions* 12: 231. [CrossRef]
- Mercadante, Linda. 2020. Spiritual Struggles of Nones and ‘Spiritual but Not Religious’ (SBNRs). *Religions* 11: 513. [CrossRef]
- Michel, Alain. 2001. Schools for an Emerging New World, forthcoming in OECD. In *Schooling for Tomorrow: Trends and Scenarios*. Paris: OECD. Available online: [https://www.oecd-ilibrary.org/education/what-schools-for-the-future\\_9789264195004-en](https://www.oecd-ilibrary.org/education/what-schools-for-the-future_9789264195004-en) (accessed on 29 September 2023).
- Neale, Palena. 2019. Self-Reflection in Leadership-Part 1: Ambitions, Values and Personality. Unabridged. Available online: <https://unabridgedleadership.com/self-reflection-in-leadership/> (accessed on 29 September 2023).
- Paek, Seung Su. 2020. A Study on the Problem and Improvement of Core Competency-Based Liberal Arts Education. *Korean Journal of General Education* 14: 11–23. [CrossRef]
- Pastoral Data Institute. 2023. Available online: [http://www.mhdata.or.kr/bbs/board.php?bo\\_table=gugnae&wr\\_id=108](http://www.mhdata.or.kr/bbs/board.php?bo_table=gugnae&wr_id=108) (accessed on 11 October 2023).
- Son, Dong Hyun. 2020. Religious Education as Liberal-General Education. *Liberal Arts and Sciences Education* 1: 1–20. [CrossRef]
- Son, Dong Hyun, Kyung Nam Hong, and Song Ee Baek. 2013. On Improvements in Korean University Value Education. *Korean Journal of General Education* 7: 259–94. Available online: <https://j-kagedu.or.kr/upload/pdf/kagedu-7-1-259.pdf> (accessed on 11 October 2023).
- Wiggins, Grant, and Jay McTighe. 2005. *Understanding by Design*, 2nd ed. Alexandria: ASCD.

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