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Research Article

Generation of Emotion-Regulation Strategies Does not Automatically Result in Their Use: Insights From a Task-Based Emotion-Regulation Strategy Instruction Intervention

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ABSTRACT

While the importance of successful emotion regulation (ER) is increasingly recognized, previous research has largely focused on the down-regulation of negative emotions. This classroom-based study investigated the impact of task-based ER strategy instruction on second language (L2) learners' enjoyment in performing oral debate tasks, using a mixed-methods, quasi-experimental design. Participants were 44 students from two English classes at a Japanese university, with one assigned as a treatment group (n = 23) and the other (n = 21) as a control group. In Week 1, the treatment group received a 10-minute ER strategy session designed to enhance task enjoyment before performing an oral debate task, while the control group performed the same task without the session. In Week 2, both groups performed another oral debate task. Bayesian independent-samples t-tests on post-task questionnaire responses showed the absence of both immediate and delayed effects of the ER strategy session on learners' during-task enjoyment. However, content analysis of students' worksheets from the ER session and their responses to open-ended questions revealed that students generated a wide range of enjoyment-enhancing strategies and recognized their utilities. The study highlights the potential benefits of ER strategy instruction designed to up-regulate positive emotions while illustrating the challenges in translating strategy generation into effective implementation in an authentic classroom setting.

Keywords: classroom intervention, emotion regulation, emotion regulation strategy, enjoyment, strategy instruction

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INTRODUCTION

Research has repeatedly shown that emotions are closely associated with key psychological constructs in second language (L2) learning, including motivation, engagement, and mindsets (Alamer & Lee, 2021; Botes et al., 2022; Dewaele & Alfawzan, 2018; Nakamura & Leis, 2024; Pawlak et al., 2020). Accordingly, successful regulation of emotions by L2 learners is essential for maximizing the quality of their learning experiences and achieving optimal learning outcomes.

One pedagogical approach to support learners to regulate their emotions is emotion regulation (ER) strategy instruction. ER strategies can be conceptualized as "thoughts and behaviors that language learners consciously choose and enact to self-regulate emotions" (Nakamura & Kenney, 2026), and ER strategy instruction—alternatively referred to as ER strategy training—can be understood as a structured set of sessions in which teachers provide learners with opportunities to learn about and/or work with ER strategies based on established goals (Nakamura, 2023). These goals may include strengthening learners' abilities to manage particular emotions, broadening their repertoire of ER strategies, or enhancing task performance by regulating emotions more effectively.

While language learning strategy instruction has a long tradition in L2 research (Hajar & Karakus, 2024), much of the work has concentrated on cognitive and metacognitive domains, with relatively little attention paid to the regulation of emotions (Plonsky, 2011). Among the limited attempts to apply strategy training to emotional processes, the focus has been largely on the down-regulation of negative emotions such as L2 anxiety and L2 boredom (Bielak, 2018; Mostafavi & Vahdany, 2016; Nakamura et al., 2021). While this line of work has demonstrated that learners can benefit from structured guidance in managing debilitating negative emotions and enhancing performance, little empirical attention has been paid to the up-regulation of positive emotions. This is a surprising trend given the growing influence of positive psychology in the field of L2 learning (MacIntyre et al., 2016).

The present study addresses this gap by examining an ER strategy session intervention aimed at enhancing learners' enjoyment in performing oral debate tasks. By shifting attention from down-regulating negative emotions to up-regulating positive ones, this study contributes to broadening the scope of strategy training and advancing our understanding of how learners' emotional experiences can be actively supported in L2 classrooms.

LITERATURE REVIEW

Emotion Regulation and Emotion Regulation Strategies

ER in educational contexts is conceptualized as learners' capacities to recognize and understand their emotions, draw on them as a source of energy, and adjust emotional experiences when these interfere with the pursuit of important goals (Boekaerts, 2011; Boekaerts & Pekrun, 2015). Long grounded in the field of psychology, ER is increasingly regarded as a key factor in academic achievement and student well-being (Burić et al., 2016; Harley et al., 2019).

While the educational concept of ER highlights the broader capacity to manage emotions, scholars have also sought to understand the particular strategies through which emotions are regulated. Educational psychology, in particular, has produced several taxonomies of ER strategies, among which Gross's process model, originally developed in psychology (Gross, 1998, 2015; Gross & Thompson, 2007), has become the most widely adopted. The model conceptualizes ER strategies along a temporal timeline, distinguishing five families of strategies—situation selection, situation modification, attentional deployment, cognitive change, and response modulation (see, e.g., Gross, 2015; Gross & Thompson, 2007; Webb et al., 2012, for comprehensive descriptions of ER strategies). Complementary frameworks have also emerged within educational psychology, such as the control-value theory taxonomy (Pekrun, 2006), which highlights competence-oriented and appraisal-oriented strategies, and Burić et al.'s (2016) five-category model, emphasizing socially focused regulation.

Despite this prominence of ER research in other fields, the identification of ER strategies in the field of L2 learning remains extremely limited. One notable exception is the work of Bielak and Mystkowska-Wiertelak (2020), who conducted a vignette study with English majors in Poland. While their classification followed Gross's five families, they identified a considerably wider range of subcategories, such as acceptance, reassurance, and wishful thinking under cognitive change, and social support and task enactment under situation modification. Their work highlights the value of examining ER strategies in a contextualized manner, where learners' regulatory behaviors are understood in relation to the demands of particular classroom activities, rather than solely through the lens of broad psychological categories. Such contextual grounding can yield classifications that are not only empirically informative but also pedagogically meaningful for L2 learning.

Strategy Instruction in L2 Learning

For supporting learners' intentional deployment of strategies, research has indicated that strategy instruction is a promising pedagogical tool (Plonsky, 2011). However, much of the existing guidance for implementing strategy training relies on highly structured procedures involving multiple stages of examination, modeling, practice, and reflection (Chamot, 2005; Dörnyei, 2001; Grenfell & Harris, 2015; Oxford, 1990), which typically require significant preparation and teacher expertise. Additionally, scholars frequently advocate exposing learners to a wide range of strategies to facilitate personalized selection (Cohen & Weaver, 2005; Cotterall & Reinders, 2004; Oxford, 1990; Rubin et al., 2007), yet this breadth increases instructional demands and may limit feasibility in everyday classrooms (Lang, 2021; Walton & Crum, 2021).

Recognizing these challenges associated with ER strategy instruction, Nakamura (2023) has proposed *task-based ER strategy instruction*, in which an ER strategy session is designed around the demands of a particular task and introduced as a pre-task activity. The primary aim of this instruction is to help students better regulate emotions that are expected to play a key role in performing the upcoming task. Such

an approach has been conceptually proposed as an actionable and context-sensitive alternative to extensive strategy training; yet, its effectiveness remains largely untested. In addition, while some of the previous studies implemented ER strategy training around tasks and reported positive outcomes, their focus was on down-regulating anxiety and not on up-regulating positive emotions (e.g., Bielak, 2018; Mostafavi & Vahdany, 2016).

Another approach to increasing the pedagogical feasibility of ER strategy instruction is to encourage learners to generate ER strategies themselves, rather than providing them with an exhaustive list or instructing them to use pre-selected strategies in a top-down manner. This way, learners can focus only on the strategies they personally perceive as relevant, usable, and suitable for their needs within the specific task. Such a bottom-up approach, however, has thus far been largely underutilized in L2 learning research.

Meta-analytic evidence further underscores the potential value of such streamlined approaches, as interventions targeting a smaller set of strategies (≤ 8) tend to produce stronger outcomes than extensive, multi-strategy programs, with only modest benefit for prolonged training (Hassan et al., 2005; Plonsky, 2011). These insights collectively highlight the need to examine whether a brief, task-based ER strategy session prompting learners to generate ER strategies on their own can meaningfully enhance their positive emotional experiences in L2 learning.

The Current Study

The current study aimed to advance research on L2 learner ER and ER strategy training in two main respects. First, it sought to shed light on the under-researched area of strategy instruction focused on the up-regulation of L2 during-task enjoyment. Second, it sought to contribute to the emerging line of research on the context-specific use of ER strategies. To this end, the following research questions guided our study:

RQ1: What ER strategies do L2 learners generate during an ER strategy session to enhance their enjoyment in performing oral debate tasks?

RQ2: Which of the strategies generated during the ER strategy session do L2 learners employ while performing the tasks?

RQ3: What immediate effect does the ER strategy session have on L2 learners' during-task enjoyment?

RQ4: What delayed effect does the ER strategy session have on L2 learners' during-task enjoyment?

Note that ER strategies to enhance during-task enjoyment in this study are referred to as enjoyment-enhancing strategies hereafter.

RESEARCH METHODS

Participants and Context

The participants were 44 (30 females, 14 males; M_{age} = 18.5; SD_{age} = 0.98) university students enrolled in two intact English classes at a national university in Tokyo, Japan. The majority (n = 41) spoke Japanese as their first language, while two spoke Korean and one spoke Spanish as their first language. Thirty-four students had never lived or studied in an English-speaking country, while five had for less than a month, three for more than a month but less than a year, and two for more than a year. Their perceived oral L2 proficiency, measured by can-do statements of the EIKEN Test in Practical English Proficiency (see In'nami & Koizumi, 2017, for the rationale of using this instrument; Yamazaki & Hiver, 2024, for its application) and converted to the Common European Framework of Reference for Languages (Eiken Foundation of Japan, n.d.), was predominantly at the B1-B2 levels (listening, 94.5%; speaking, 81.8%), with smaller cohorts at the C1 (listening, 2.3%; speaking, 4.5%) and A2 (listening, 2.3%, speaking 13.6%) levels.

The two English classes were elective courses designed to improve students' ability to use English in authentic contexts. Both classes were delivered by the first author during the academic semester from April to July 2025 under the same syllabus and instructional materials.

Oral Debate Tasks

Two oral debate tasks—tasks A and B—were utilized in this study (the slides outlining the requirements for both tasks are provided in Appendix A). To perform task A, participants were first prompted by the instructor to pair up with their seating neighbors. Next, the instructor introduced a controversial debate topic and randomly assigned each member of all pairs to argue either for or against it. They were then instructed to spend seven minutes on individual preparation before the debate. During this preparation phase, participants were prompted to gather information from available resources to support their arguments. Importantly, they were required to find supporting information from at least one reliable resource (e.g., news reports, statistical analyses). After this phase, participants proceeded to debate the controversial topic from their assigned positions for eight minutes. The instructor explained that participants had to keep in mind the following points during the debate: (1) each pair had to reach a conclusion (i.e., decide a winner), (2) after the debate, randomly selected pairs would be asked to verbally share their conclusions with the whole class, and (3) when asked to share, each pair must verbally present at least two reasons for reaching the conclusion. After eight minutes of debating, the sharing phase began.

Following this, participants were provided with a new controversial debate topic and instructed to switch positions from the previous debate (i.e., from for to against, or vice versa). Subsequently, all participants engaged in individual preparation for seven minutes, followed by an eight-minute debate. Participants were again reminded of the three aforementioned points during the debate. Lastly, after the debate, some pairs were randomly selected to verbally share their conclusions, along with at least two

supporting reasons, with the whole class. The first and second controversial topics for the debate were as follows: *Should governments prioritize environmental sustainability over economic growth in national policy-making?* And *is it justifiable to impose censorship on digital platforms to mitigate the spread of misinformation and hate speech?*

The design and implementation of task B were nearly identical to task A, with two exceptions. First, participants again freely formed pairs with their seating neighbors, but they were not prompted to pair up with the exact same person as they did for task A. Thus, while some participants have performed both tasks with the same pair, some have performed the two with different pairs. Second, the controversial debate topics were different. Specifically, they were *Should the criminal justice system incorporate artificial intelligence into its decision-making processes?* And *should governments enact policies that require companies to address gender pay gaps in their organizations?*

In developing these tasks, we paid special attention to ensure that the tasks would not be easily enjoyable on their own because, otherwise, there would be no need to enhance participants' during-task enjoyment. To clarify, our aim was not to develop stressful or unrealistically challenging tasks, but to design and implement tasks that were genuinely challenging but replete with opportunities to use English in authentic ways. Therefore, a draft version of the tasks was piloted with 23 Japanese learners of English from the same university where the study was conducted. After the piloting, the learners were asked to suggest ways to make the task more genuinely challenging yet meaningful. These learners' suggestions were incorporated into the final design and implementation of the tasks. Note that the piloting was also used to determine the appropriate time for individual preparation (i.e., seven minutes) and debate (i.e., eight minutes).

Task-Based ER Strategy Session

The aim of the ER strategy session was to enhance participants' enjoyment in performing the oral debate tasks by providing opportunities to generate their own enjoyment-enhancing strategies. The session, consisting of two phases, was introduced as a pre-task activity after participants received task instructions. In the first phase, participants were introduced to the concept of ER strategies to enhance enjoyment using PowerPoint slides. They were then instructed to individually think about how they could enhance the enjoyment of performing the tasks and write down the strategies on a worksheet (see Appendix B for slides and worksheet). No example strategies were provided here so as not to steer participants towards predetermined ideas. During this phase, the instructor walked around the class to answer questions, monitor progress, and ensure intervention fidelity. Once the instructor felt that all participants had completed listing the strategies, they were asked to form a group of three or four with their seating neighbors. In the second phase, participants shared their listed strategies within their groups and were encouraged to revise or expand their strategy lists. Again, the instructor walked around the class to monitor progress. Once the instructor was confident that all the participants had finalized their lists, they proceeded to perform the oral debate task A. The worksheets were collected at the end of the class. The entire session lasted approximately 10 minutes (i.e., five minutes per phase).

Instruments

This study employed questionnaires that included both quantitative (Likert-scale) and qualitative (open-ended) components to capture complementary perspectives on the target constructs. When and how the questionnaires were used is delineated in the subsequent section. Full item texts of the quantitative component are provided in Appendix C.

Quantitative component

Pre-Task Enjoyment (4 items). This scale was adapted from Bieleke et al. (2020) to assess participants' anticipated enjoyment after receiving task instructions (e.g., "I think I'll enjoy the task").

During-Task Enjoyment (4 items). This scale was adapted from Bieleke et al. (2020) to assess the enjoyment that participants experienced while performing the task (e.g., "I enjoyed the task").

Perceived Effectiveness of ER Strategy Session (1 item). This single-item scale was developed for the present study to assess participants' perceived effectiveness of the ER strategy session. A 6-point Likert scale (1 = It was not effective at all, 6 = It was very effective) was employed for all questionnaire items.

Qualitative Component

Open-Ended Questions. A total of five open-ended questions were used in this study. Only participants in the treatment group answered the questions. Table 1 summarizes these questions together with the rationale for their inclusion.

All the questionnaire items were administered online via Qualtrics in both English and Japanese. Items were first developed in English and then collaboratively translated into Japanese by the authors. Both authors carefully reviewed the items and confirmed their comprehensibility in both languages, consulting ChatGPT powered by GPT-5.2 when necessary.

Table 1. *Open-Ended Questions*

Open-ended question	Rationale	Week
Before performing the task, you submitted a list of strategies to enhance your enjoyment during task performance. Out of the listed strategies, which did you actually employ? Please write them down. If you did not employ any strategies, please write "none."	To answer RQ 2	1
Were the strategies you employed actually helpful to enhance your enjoyment during task performance? Please focus on each employed strategy and explain whether it was helpful or not and why. If you did not employ any strategies during task performance, explain why you did not employ any.	To provide more detailed insights into RQs 3 and 4	1
Please explain in detail the reason for your rating in the previous question about the effectiveness of the emotion regulation strategy session.	To provide more detailed insights into RQs 3 and 4	1
How do you think we can make the emotion regulation strategy session more effective in helping learners better understand how to enhance their enjoyment during task performance? Please share your thoughts in detail.	To provide implications for future research on ER strategy instruction	1
Do you think the emotion regulation strategy session you completed last week had an impact on your enjoyment during this week's task? If yes, how did it impact your enjoyment? If not, please explain why.	To provide more detailed insights into RQ 4	2

Note. RQ = research question; Week = the week participants responded to the question

Instruments

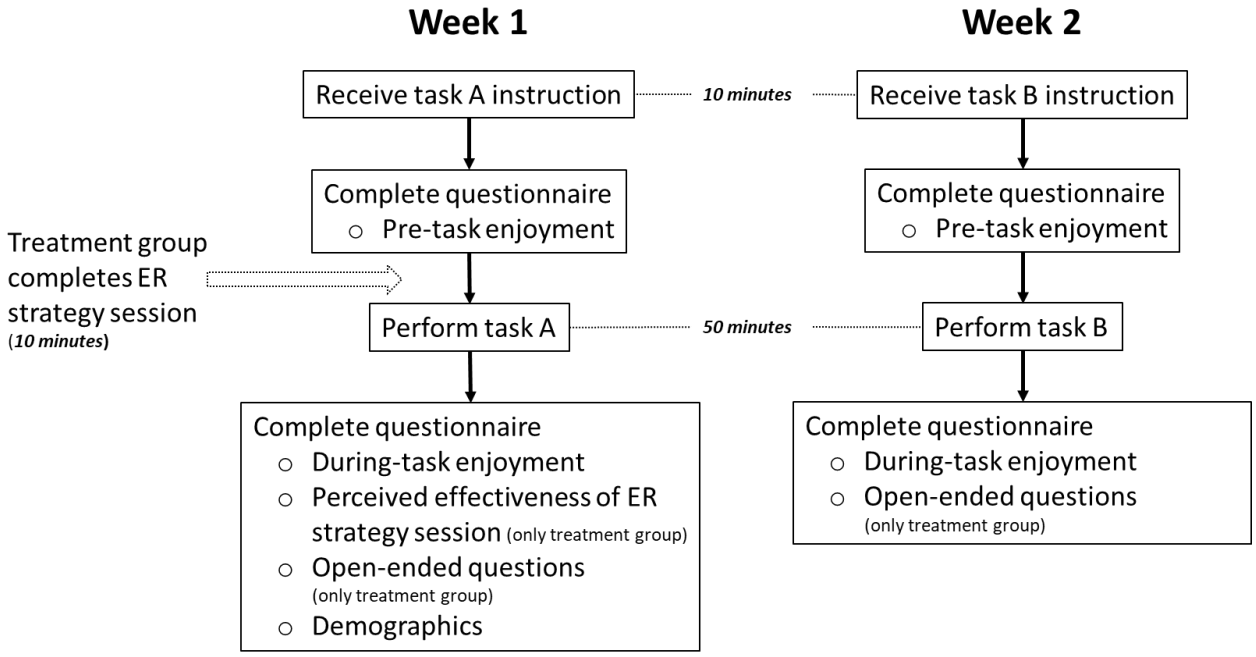
This study adopted a quasi-experimental design. After obtaining ethical approval, the class with a larger number of students (n = 23) was purposefully assigned to the treatment group, whereas the smaller class (n = 21) was assigned to the control group. Participation was voluntary, and written informed consent was obtained from all participants prior to their involvement. Data collection took place over two weeks (see Figure 1 for a schematic overview).

In Week 1, participants in both groups received approximately 10 minutes of task instruction for task A, followed by a questionnaire assessing pre-task enjoyment. The treatment group then engaged in a 10-minute task-based ER strategy session, while the control group proceeded directly to task A. After performing task A (50 minutes), both groups completed questionnaires measuring during-task enjoyment and

demographic information. The treatment group responded to additional, open-ended questions (see Table 1).

In Week 2, participants in both groups received a 10-minute instruction for task B, completed the pre-task enjoyment questionnaire, and then performed the task (50 minutes). Afterward, they rated their during-task enjoyment. The treatment group responded to an additional open-ended question assessing the delayed effects of the ER strategy session. The total duration of the data collection was approximately 80 minutes in the first week and 65 minutes in the second week.

Figure 1. *Schematic Representation of Data Collection Protocol*



Data Analysis

To answer the first research question concerning the enjoyment-enhancing strategies participants generate during the ER strategy session, their ER strategy worksheets were content analyzed. All the listed enjoyment-enhancing strategies were first compiled on a whiteboard, after which the two authors collaboratively coded them to

identify similarities and organize them into broader categories. The coding process was recursive, with the criteria being flexibly adjusted to ensure accurate categorization of strategies.

To address the second research question, which examined the enjoyment-enhancing strategies participants employed during task performance, their responses to the open-ended question about the employed enjoyment-enhancing strategies were collected and tabulated. To answer the third and fourth research questions, the quantitative data obtained from the questionnaires were first organized in Excel sheets and imported into JASP (Version 0.19.3; JASP Team, 2025) for subsequent analyses. For the enjoyment questionnaires, sampling adequacy (KMO), sphericity (Bartlett's test), and reliability (reliability coefficients ω and α) were checked. For both Week 1 and Week 2, sampling adequacy and sphericity were confirmed (Week 1: KMO = 0.84, Bartlett's test: $\chi^2(6) = 160.02$, $p < .001$ for pre-task enjoyment; KMO = 0.86, $\chi^2(6) = 175.82$, $p < .001$ for during-task enjoyment. Week 2: KMO = 0.83, $\chi^2(6) = 146.27$, $p = .011$ for pre-task enjoyment; KMO = 0.83, $\chi^2(6) = 179.64$, $p = .004$ for during-task enjoyment). Reliability was high across all measures (For Week 1, pre-task enjoyment ω = .93, α = .94; during-task enjoyment ω = .91, α = .91. For Week 2, pre-task enjoyment ω = .93, α = .94; while during-task enjoyment ω = .92, α = .92). Based on the results, Principal Component Analysis was conducted to compute component scores, with normality and outliers checked via histograms, Q–Q plots, and boxplots, confirming that the data met the assumptions required for subsequent analyses. Following this, Bayesian independent-samples t-tests were conducted to examine the differences in perceived L2 proficiency and pre-task enjoyment (measured at Weeks 1 and 2) between groups to ensure baseline homogeneity. The effect of ER strategy training on during-task enjoyment (RQ3) was examined through one-tailed Bayesian independent-samples t-tests. The delayed effect on during-task enjoyment (RQ4) was examined through two-tailed Bayesian t-tests.

Lastly, regarding participants' responses to the open-ended questions about the helpfulness of enjoyment-enhancing strategies and benefits, suggested improvements, and long-lasting impacts of the ER strategy session, all responses were initially

compiled into an Excel sheet and subsequently subjected to content analysis performed individually by the first author for tabulation.

RESULTS

RQ1: Generated Enjoyment-Enhancing Strategies

The enjoyment-enhancing strategies listed by participants during the ER strategy session are summarized in Table 2. In total, 44 strategies were generated. Content analysis of these strategies yielded five broad categories. The first category was labeled *Competence Building*. Strategies included in this category were to be used at the individual preparation phase of the task to facilitate preparation and build participants' competence in performing the upcoming debate. Concrete strategies specifying the type of supporting information to search for (e.g., *prepare visual aids*, *study how to debate effectively*), as well as more general strategies providing broad guidelines for preparation (e.g., *prepare in detail*, *plan ahead*), were included.

The second category, *Positive Environment Building*, included strategies intended for use immediately before the debate to foster a comfortable setting for interaction. Although less frequently mentioned, these strategies addressed both the physical environment (e.g., *sit in a circle*, *sit face to face*) and the psychological environment (i.e., *promise with partner to enjoy the task*).

The third category was named *Task Completion* and encompassed strategies to be used during the debate phase of the task to smoothly fulfill the task requirements. This category was further divided into two subcategories: *Inter-Personal* and *Intra-Personal*. Strategies in the *Inter-Personal* subcategory involved both members of a pair, aimed at establishing and maintaining a positive relationship within the pair (e.g., *make small talk*, *show responsiveness*). In contrast, those in the *Intra-Personal* subcategory could be employed individually and focused on active and confident participation in the debate (e.g., *do not hesitate to speak up*, *provide opinions from*

diverse perspectives). The most commonly noted strategy among all—*pretend to speak like someone else*—belonged to this subcategory.

Similar to the third category, the fourth category, *Winning the debate*, also comprised strategies intended to be used during the debate phase of the task. However, one important difference was that while the strategies in the third category were aimed at smooth task completion, those in the fourth category were aimed at successful task completion by winning the debate. Examples include *provide clear opinions* and *do not submit easily*.

Lastly, the fifth category, labeled *Positive Framing*, encompassed strategies that could be applied at any moment during task performance. The overarching aim of these strategies was to positively frame the task and its affordances. We further divided this category into three subcategories. The first, *Reappraisal*, included strategies intended to reinterpret negative situations or potential outcomes more positively (e.g., *try to think that it is fine to make mistakes*, *try to think that it is fine not to speak fluently*). The second and third subcategories, named *Utility Value Reminder* and *Enjoyment Reminder*, respectively, both involved reminding oneself of the value of performing the task. Strategies in *Utility Value Reminder* emphasized the instrumental benefits of performing the task (i.e., *think about the benefits of performing the task*), whereas those in *Enjoyment Reminder* highlighted the intrinsic value of task performance (e.g., *try to think that English is fun*).

Table 2. *Enjoyment-Enhancing Strategies Generated During ER Strategy Session and Employed During Task Performance*

Time	Category	Subcategory	Enjoyment-enhancing strategies	Generated *n*	Employed *n*
During individual search	**Competence Building**		Prepare visual aids (e.g., tables, graphs, slides)	4	1
			Prepare in detail	3	1
			Prepare a specific plan for what I am going to say during the task	2	2
			Study how to debate effectively	2	

			Anticipate the partner's opinions and preemptively prepare responses	1	
			Gather information that effectively supports my opinions	1	
			Plan ahead	1	
			Prepare for effective time management	1	
			Search multiple sources to gather supporting information	1	1
			Start by thinking about unacademic topics (e.g., personal examples)	1	
Before debate	**Positive Environment Building**		Promise with the partner to enjoy the task	1	
			Sit in a circle	1	
			Sit in a relaxing position	1	
			Sit face to face	1	1
During debate	**Task Completion**	*Inter-Personal*	Make small talk	2	
			Nod to what the partner says	2	1
			Show responsiveness	2	2
			Ask questions	1	
			Do not contradict what the partner says	1	
			Keep the conversation going	1	
			Listen to the partner's opinions carefully	1	
			Use Japanese to check each other's understanding	1	
		Intra-Personal	Pretend to speak like someone else (e.g., foreigner, native speaker, favorite character, famous person)	8	
			Do not hesitate to speak up	2	
			Provide opinions from diverse perspectives	2	
			Speak as if I am talking with a friend	2	1
			Have a sense of playfulness	1	
			Speak casually	1	
			Talk about my preferences and interests	1	
			Use prior knowledge	1	1
			Use nonverbal expressions frequently	1	
	Task Winning		Provide opinions clearly	2	2
			Do not bend my opinions	1	1
			Do not submit easily	1	
			Search for the weaknesses of the partner's opinions and attack them	1	

			Use the following famous phrase in Japan for winning debates: That's just what you think, isn't it?	1	
Throughout task	**Positive Framing**	*Reappraisal*	Try to think that it is fine to make mistakes	4	2
			Set a low bar for evaluating my task performance	1	
			Try to think that it is fine not to speak fluently	1	
			Try to think that there is nothing to be ashamed of when speaking in English	1	
			Try to think that understanding the partner's thoughts is fun	1	
		Utility Value Reminder	Think about the benefits of performing the task (e.g., grade, skill development)	5	2
		Enjoyment Reminder	Try to think that English is fun	1	1
			Try to think that the task is fun	1	

Note. Strategies were generated by 23 participants in the treatment group; *n* = number of participants who generated/employed the strategies

RQ2: Employed Enjoyment-Enhancing Strategies

Along with the 44 enjoyment-enhancing strategies generated during the ER strategy session, Table 2 lists the strategies actually employed during task performance. Out of the 44 strategies, only 14 (31.8%) were actually employed. The employed strategies spanned all five broad categories, but no clear pattern of use emerged. Notably, only 10 of the 23 participants in the treatment group (43.5%) reported employing any of the strategies they had generated.

RQ3: The Immediate Effect of ER Strategy Session

Table 3 presents descriptive statistics for pre-task enjoyment, during-task enjoyment, and self-perceived listening/speaking proficiency in Week 1. Results of two-tailed Bayesian independent-samples t-tests showed no difference in pre-task enjoyment (BF_{+0} = 0.32), perceived listening proficiency (BF_{10} = 0.30), and perceived speaking proficiency (BF_{10} = 0.35) between the treatment and control groups, indicating that the

two groups were largely homogeneous in terms of these variables at the baseline in Week 1.

The one-tailed Bayesian independent-samples t-tests showed moderate evidence for no difference between the groups in during-task enjoyment (BF_{+0} = 0.17 BF+). In other words, the results suggested that the task-based ER strategy session did not produce a meaningful immediate effect on learners' during-task enjoyment.

Table 3. *Descriptive Statistics for Pre-Task Enjoyment, During-Task Enjoyment, and Perceived Oral L2 Proficiency in Week 1*

		M	*SD*	95% CI	Skewness	Kurtosis
Pre-task enjoyment	Treatment	4.25	0.98	3.83, 4.68	-0.47	0.57
	Control	3.96	0.92	3.54, 4.38	0.06	-1.03
During-task enjoyment	Treatment	4.30	1.05	3.85, 4.76	-0.16	-0.21
	Control	4.01	0.88	3.61, 4.41	-0.10	1.29
Perceived listening	Treatment	5.65	0.65	5.37, 5.93	-0.63	0.70
	Control	5.67	0.48	5.45, 5.89	-0.76	-1.58
Perceived speaking	Treatment	5.26	0.92	4.87, 5.66	-0.96	-0.07
	Control	5.10	0.77	4.75, 5.45	-0.90	1.56

Note. M = mean; SD = standard deviation; CI = confidence interval.

RQ4: The Delayed Effect of ER Strategy Session

Table 4 presents descriptive statistics for pre-task enjoyment and during-task enjoyment in Week 2. Results of the two-tailed Bayesian independent-samples t-test showed no difference between the treatment and control groups in terms of pre-task enjoyment (BF_{+0} = 0.32), largely indicating the baseline homogeneity of the two groups in Week 2 in terms of this variable. The two-tailed Bayesian independent-samples t-tests showed moderate evidence for no difference in during-task enjoyment (BF_{+0} = 0.31). This finding suggests that the ER strategy session did not yield a meaningful delayed effect on learners' during-task enjoyment.

Table 4. *Descriptive Statistics for Pre-Task Enjoyment and During-Task Enjoyment in Week 2*

		M	*SD*	95% CI	Skewness	Kurtosis
Pre-task enjoyment	Treatment	3.89	0.92	3.46, 4.32	-0.08	0.82
	Control	3.78	1.03	3.30, 4.26	-0.52	2.40
During-task enjoyment	Treatment	4.23	1.20	3.66, 4.79	-0.50	-0.27
	Control	4.15	1.08	3.64, 4.66	-1.47	3.51

Note. M = mean; SD = standard deviation; CI = confidence interval. Due to absences, *ns* of treatment and control groups in Week 2 were 20 and 20, respectively.

DISCUSSION

Generated and Employed Enjoyment-Enhancing Strategies

The results of our data analysis showed that participants generated various enjoyment-enhancing strategies during the ER strategy session. The most widely listed strategies, labeled as *Competence Building*, were designed to be used during task preparation to enhance learners' competence to perform the upcoming debate tasks. This finding aligns with the competence-oriented emphasis of the control-value theory (Pekrun, 2006), which posits that learners' perceived competence is central to the regulation of achievement emotions, and echoes previous research highlighting the role of competence-focused ER strategies in L2 learning and broader academic contexts (Burić et al., 2016; Harley et al., 2019; Nakamura & Kenney, 2026). Other strategies that students commonly listed in their ER worksheets were also linked to task accomplishment, suggesting a strong link between enjoyment and L2 performance, as indicated by previous studies (Dewaele & Alfawzan, 2018).

While the majority of generated enjoyment-enhancing strategies focused on behavioral aspects, *Positive Framing* was distinctive as a cognitively oriented strategy. This corresponds to the concept of reappraisal, grouped into cognitive change in Gross's process model (Gross & Thompson, 2007), and corroborates the finding of Nakamura and Kenney (2026) revealing the use of reappraisal as an ER strategy to enhance L2 learners' during-task enjoyment. Lastly, the variety of strategies

developed by the students was closely tied to the features of the debate tasks, such as approaches to win the argument, which echoes the work by Bielak and Mystkowska-Wiertelak (2020) that illustrated a fine-grained layer of complex ER strategies.

Despite generating a wide range of enjoyment-enhancing strategies, however, less than half of the participants in the treatment group actually employed them. Given that the ER strategy session was tailored to be task-specific and was delivered immediately before task performance, we anticipated that participants would automatically apply the generated strategies to practice. Yet, the results were contradictory. The reasons participants did not employ the generated strategies were content analyzed and classified into four types, summarized in Table 5.

Table 5. *The Reasons for not Employing any Enjoyment-Enhancing Strategies*

Reasons	***n***	**Descriptions**
Cognitive Load	3	The task was too cognitively demanding to employ the strategies
Emotional Load	1	The task was too emotionally draining to employ the strategies
Time Constraint	1	Not enough time was allocated to employ the strategies
Unwanted Attention	1	Employing the strategies might draw unwanted attention from classmates

Note. n = number of participants who mentioned the reason. Although 12 participants reported not employing any strategies, we were only able to list a limited number of responses because some participants seemed to have misinterpreted the instructions for the open-ended question and provided irrelevant responses.

First, the *Cognitive Load* of the task was mentioned, as highlighted in the following excerpts:

> *Because I didn't have enough mental capacity to use the strategy.* (anonymized participant)
>
> *Because I was concentrating so hard on expressing my thoughts in English, I had no capacity to think about the strategy.* (anonymized participant)

> *Because I was so focused on speaking in English, I completely forgot about the strategy.* (anonymized participant)

It appears that some participants allocated their cognitive resources primarily to meeting task demands and, consequently, did not have additional mental capacities to attend to and implement the generated enjoyment-enhancing strategies. Next, as shown in the excerpt below, one participant explained feeling pressured by the task demands and their expectation to use English well during task performance, hindering them from employing the generated strategies (*Emotional Load*):

> *I feel pressure because I want to prepare perfectly in order to speak well when I have to present.* (anonymized participant)

Limited time for task completion was another reason raised by a participant, especially since the strategy generated by them required some time to be implemented (*Time Constraint*):

> *The strategy I wrote needed some extra time, and because today's class was moving quickly, I think I might have been able to use it if there had been enough time.* (anonymized participant)

Lastly, one participant feared that using the generated strategies might make them stand out, resulting in receiving unwanted attention from classmates (*Unwanted Attention*):

> *I went with the flow because employing the strategy seemed likely to make me stand out.* (anonymized participant)

These comments underscore the gaps—both psychological and physical—between generating and implementing enjoyment-enhancing strategies. Given the small-scale nature of this study, it is difficult to fully examine the nature of these gaps, nor can it be claimed that the identified gaps are exhaustive. In fact, the heterogeneity of these gaps implies that additional types of gaps may be identified if a larger group of L2 learners were studied. While continued exploration is thus warranted, what is evident from these comments is that the generation of strategies does not

automatically result in their use; for certain L2 learners, there may be hurdles that need to be overcome before realizing imagined strategies.

Fortunately, those who did use the enjoyment-enhancing strategies reported benefits. In particular, strategies aimed at achieving successful task performance were valued positively. These include strategic planning and execution of the debate, represented as *Competence Building*, *Task Completion*, and *Task Winning*. For example, excerpts below foreground the multiple benefits of utilizing *Competence Building* strategies, including smooth and effective task performance, increased motivation, and reduced anxiety:

Employed strategy: Prepare visual aids (e.g., tables, graphs, slides)

> *It was helpful because it made it easier for me to organize my own opinions and persuade my partner. Since the use of visual materials will increase after I start working, I felt a sense that I was doing something practical, which also helped boost my motivation.* (anonymized participant)

Employed strategy: Prepare a specific plan for what I am going to say during the task

> *Because I did mental rehearsal on what to say and in what order, I was able to approach the task without panicking.* (anonymized participant)
>
> *It helped reduce my anxiety when speaking.* (anonymized participant)

Employed strategy: Prepare in detail

> *When my opinions were clear and supported by evidence, I could speak with confidence and having that clarity gave me the mental space to think about how to rephrase things in English, which made it easier for the words to come out smoothly.* (anonymized participant)

Some participants also perceived *Task Completion* and *Task Winning* strategies to be beneficial in successfully completing and winning the task, as the names of these categories suggest:

Employed strategy: Show responsiveness (*Task Completion*)

> *By accepting each other's opinions without making the other person feel uncomfortable, we were able to reach a conclusion smoothly.* (anonymized participant)

Employed strategy: Use prior knowledge (*Task Completion*)

> *When discussing something I'm not familiar with, I tend to focus on understanding the content of the discussion. However, when I had a sufficient grasp of the topic, I was able to pay more attention to the conversation itself and to my partner's reactions.* (anonymized participant)

Employed strategy: Do not bend my opinions (*Task Winning*)

> *Consciously trying not to bend my opinion helped me come up with concrete ideas for how to refute my partner's arguments.* (anonymized participant)

Overall, these comments collectively point to a variety of benefits that ER strategies could offer to L2 learners, which echoes Mostafavi and Vahdany (2016) demonstrating the beneficial effects of ER strategy training on L2 learners' oral performance in narrative tasks. Note that some participants also provided positive comments regarding the use of the other two types of enjoyment-enhancing strategies (i.e., *Positive Environment Building* and *Positive Framing*). Due to space limitations, we

present a comprehensive summary of the perceived benefits of enjoyment-enhancing strategies in Appendix D.

The Immediate Effect of ER Strategy Session

Results indicated that the ER strategy session did not exert any significant effect on participants' during-task enjoyment in the short term. This outcome does not align with the general research findings suggesting overall positive effects of L2 learning strategy instruction (Hassan et al., 2005; Plonsky, 2011). A plausible explanation for this discrepancy is the incongruence between the generation and use of enjoyment-enhancing strategies. Table 2 clearly shows that the ER strategy session was successful in having participants generate a plethora of enjoyment-enhancing strategies. The multiple perceived benefits of these strategies, evidenced by the previous excerpts and listed in Appendix D, also underscore their potential to enhance participants' during-task enjoyment. Yet, our analysis revealed that participants in the treatment group did not experience statistically discernible improvements in during-task enjoyment compared to those in the control group. In this case, the fact that only a limited number of participants in the treatment group actually employed the generated enjoyment-enhancing strategies should be the key to interpreting this finding. While the ER strategy session prompted participants to generate enjoyment-enhancing strategies, it may not have been sufficient to help participants overcome the psychological or physical barriers—listed previously in Table 5—to implementing these strategies. Consequently, their during-task enjoyment may not have improved.

Participants' perceptions of the effectiveness of the ER strategy session corroborate this argument. On a 6-point Likert scale, the effectiveness of the ER strategy session was rated as neutral (M = 3.52; SD = 1.41; see Appendix E for a comprehensive summary of the perceived effectiveness of the ER strategy session). Notably, a common reason for negative evaluations was the failure to employ any enjoyment-enhancing strategies, as shown in the excerpts below:

Rating: It was not so effective

I did not use any strategies. (anonymized participant)

I concentrated too much on speaking in English. (anonymized participant)

Rating: It was not effective

There was no opportunity to use the strategies I had thought of during the task. (anonymized participant)

Rating: It was not effective at all

I was not thinking of using any strategies. (anonymized participant)

In fact, even some participants who rated the session as somewhat effective acknowledged not using the strategies they had generated:

Rating: It was somewhat effective

I did not use any strategies. (anonymized participant)

I have never paid attention to enjoyment-enhancing strategies during tasks. (anonymized participant).

These comments highlight once again the gap between generating and employing enjoyment-enhancing strategies. Then, why was the ER strategy session insufficient to help participants overcome the barriers between strategy generation and implementation? A closer look at participants' reasons for not employing the generated strategies (see Table 5) indicates that the design and implementation of the task may have played a role. To reiterate, the task was intentionally designed and implemented to be genuinely challenging while offering rich opportunities for authentic English use,

thereby preventing it from being easily enjoyable (see the section Oral Debate Tasks). Although this design was necessary to produce internally valid insights, it may have backfired by imposing extraneous cognitive and emotional load on participants during task performance. As a result, they may have had limited mental capacity to experiment with the generated strategies. Overall, the ER strategy session may have yielded unsuccessful immediate results because the task's affordances were not ideal for participants to comfortably employ the generated strategies. We elaborate on this point subsequently when discussing the theoretical and pedagogical implications of this study.

In addition, prior research syntheses have shown that single-session interventions, such as the ER strategy session implemented in this study, typically produce smaller effects than multi-session interventions with longer duration (Hassan et al., 2005; Plonsky, 2011). Therefore, the simplicity of the ER strategy session may have been another contributing factor to the null findings. Nonetheless, short interventions hold considerable pedagogical value since they are more feasible for busy practitioners to adopt and replicate (Lang, 2021; Yamazaki, 2025). From a pedagogical standpoint, ideal interventions are concise, practical, and impactful (see Walton & Crum, 2021, for similar arguments). While the ER strategy session in this study was indeed concise and practical, it ultimately fell short in terms of impact, which represents an important point for improvement.

Despite the statistically null findings, however, some participants did leave positive comments about the ER strategy session (see also Appendix E):

Rating: It was very effective

> *By summarizing the strategies to enjoy the task, I felt that I was able to complete the task more meaningfully.* (anonymized participant)

Rating: It was effective

> *Compared to my expectations and motivation before actually doing the task, I was able to enjoy it and participate in it more actively.* (anonymized participant)
>
> *By listening to my friends' strategies, I was able to notice important values and ideas I hadn't been aware of.* (anonymized participant)
>
> *By focusing on enjoying the task, I was actually able to make it enjoyable.* (anonymized participant)

These comments suggest that the ER strategy session was not entirely ineffective. In fact, it helped some participants understand the meaningfulness of the task content, prompted them to participate more actively in the task, offered opportunities to explore their unnoticed values, and enhanced their enjoyment during the task. These qualitative insights are consistent with previous research demonstrating positive effects of L2 learning strategy instruction (Hassan et al., 2005; Plonsky, 2011). Although it is important to acknowledge that these benefits did not manifest as a statistically discernible improvement in during-task enjoyment, they remain an encouraging indication for future work on ER strategy instruction.

The Delayed Effect of ER Strategy Session

The results of the data analysis signified that the ER strategy session failed to yield a delayed (i.e., measured one week after task performance) impact on participants' during-task enjoyment. Given that the session was ineffective even in improving their during-task enjoyment in the short-term (i.e., measured immediately after task performance), this finding is understandable. Participants' responses to the open-ended question about the delayed impact of the ER strategy session show, once again, that some participants did not employ any enjoyment-enhancing strategies they had previously generated when performing Week 2's oral debate task:

> *Because I had completely forgotten the strategies I came up with last week, the session didn't affect how much I enjoyed this week's task.* (anonymized participant)
>
> *I came up with some strategies last week, but since I wasn't very conscious of them, I felt the session didn't have much effect.* (anonymized participant)
>
> *The topic was a bit heavy, so I didn't have the mental capacity to employ any strategies. I feel like I could have done it if I had a stronger vocabulary and more background knowledge.* (anonymized participant)
>
> I thi

As previously discussed, this gap between the generation and use of enjoyment-enhancing strategies was likely a key cause of the ineffectiveness of the ER strategy session in the short-term. The above comments also suggest that the same gap may equally have contributed to the absence of a delayed effect.

At the same time, one positive finding was that some participants seemed to have reemployed the enjoyment-enhancing strategies they had generated previously, as shown in the excerpts below:

> *I feel like I became more conscious about completing the task in an enjoyable way. By listening with expressive facial reactions, I tried to create a fun atmosphere. So, I think the session did have an impact!* (anonymized participant)
>
> *Since I had prepared an emotional strategy in advance, I could work on the task smoothly and focus on solutions when faced with difficulties.* (anonymized participant)
>
> *When I speak in English, my emotions sometimes affect my fluency, so today I applied what I learned from last time and felt relatively calm by roughly planning what I wanted to say beforehand.* (anonymized participant)

These positive comments demonstrate that the ER strategy session may have had a delayed positive impact on some L2 learners. However, these benefits did not appear at a statistically discernible level, as was also the case for the session's immediate impact. In a nutshell, the ER strategy session in this study seemed to have been effective only for a limited number of participants (see also Appendix F for a comprehensive summary of perceived delayed impacts of the session). How can the session then be improved to reach and benefit a larger group of L2 learners? We now turn to this discussion in the subsequent section.

IMPLICATIONS FOR RESEARCH AND PRACTICE

As emphasized in the preceding sections, one key finding of this study is that prompting L2 learners to generate enjoyment-enhancing strategies does not automatically translate into their actual implementation. Psychological (e.g., cognitive load, emotional load) and/or physical (e.g., time constraints) barriers seem to exist after the generation of strategies (see Table 5), and L2 learners need to overcome these barriers in order to actualize the generated strategies into practice.

This finding has substantive implications for researchers. In future research on ER strategy instruction, it is essential to go beyond merely instructing ER strategies and make explicit attempts to facilitate L2 learners to employ the instructed strategies, even if the instruction is task-specific and provided immediately before task performance. This entails providing support for L2 learners to overcome the psychological and physical barriers that hinder the implementation of ER strategies. According to the reasons for not employing enjoyment-enhancing strategies (see Table 5), such support might include reducing learners' cognitive and emotional load during task performance, allowing sufficient time for task completion, and minimizing face-threatening situations.

Concrete strategies to provide such support can be found outside the domain of ER strategy instruction. For example, to reduce the cognitive load associated with task

performance, insights may be derived from the work on load reduction instruction (e.g., Evans & Martin, 2023; Martin, 2016) and task complexity and sequencing (e.g., Malicka, 2020; Robinson, 2022). To name a few techniques, offering pre-task practice sessions, providing materials in diverse modalities, and reducing reasoning demands may be effective. To mitigate emotional costs, a growing body of work on cost-reduction interventions (e.g., Rosenzweig et al., 2020; Yamazaki, 2025) may be informative. Specific techniques include prompting learners to reflect on the emotional costs associated with task performance, share their ideas with one another, and collaboratively discuss ways to positively reinterpret them. Broadening the scope of ER strategy research to integrate such insights from related fields could represent a promising direction for future work on ER strategy instruction.

Participants' suggestions for improving the ER strategy session also hold substantive implications for identifying concrete strategies that bridge the generation and use of enjoyment-enhancing strategies. Provided suggestions were content analyzed and classified into five broad categories (see Appendix G for full categories and concrete suggestions). Many suggestions focused on modifying the implementation of the ER strategy session, such as repeated implementations and the provision of example enjoyment-enhancing strategies. These suggestions offer direct insights into designing effective ER strategy instruction in future work. At the same time, some suggestions concerned modifying the design (e.g., adopt casual and/or interesting task topics) and implementation (e.g., offer examples of supporting information to search for, provide some time for pairs to get to know each other) of the task following the session. Collectively, these suggestions underscore, once again, the importance of carefully designing and implementing tasks to develop task-based ER strategy instruction that encourages L2 learners to employ ER strategies and positively influences their task-specific emotions. As previously discussed, tasks with reduced cognitive and emotional load may facilitate L2 learners' employment of ER strategies. The concrete suggestions outlined in Appendix G should serve as practical guidelines for designing such tasks.

Simultaneously, the focus on bridging the gap between ER strategy generation and use has substantial implications for L2 practitioners as well. If practitioners plan to conduct ER strategy instruction in their classes, it is likely because they aim to help students apply ER strategies and positively shape their emotional experiences. Based on the findings of this study, a concrete recommendation for such practitioners is to support students in overcoming the psychological and physical barriers associated with using ER strategies. Simply allowing students to generate ER strategies—or possibly even directly communicating certain strategies—is unlikely to lead to their employment unless the barriers are removed. Rather, practitioners may need to identify the underlying causes of these barriers (e.g., cognitive and emotional load of the task) and actively mitigate them (e.g., by adopting interesting and casual topics and avoiding time pressure) to effectively shape their students' positive emotional experiences through ER strategy instruction.

CONCLUSION

This classroom-based study examined the effects of a task-based ER strategy session on L2 learners' enjoyment in oral debate tasks. Bayesian analyses indicated no meaningful immediate or delayed effects of the session, yet qualitative findings suggested that some students recognized the value of enjoyment-enhancing strategies, even though they were not always able to apply them during tasks. Taken together, these results underscore the need to consider the gap between strategy generation and use—as well as the psychological and physical barriers that impede this translation—when evaluating the effectiveness of ER training. Although limited by its small sample size and quasi-experimental nature, the present study offers preliminary insights into designing contextualized, task-based ER strategy instructions focusing on the up-regulation of positive emotions. Future research can make use of these insights to explore and clarify the conditions under which ER strategy instruction can most effectively benefit L2 learners.

Authors' Contributions

JY and SN collaboratively designed the study. JY completed the data collection. Quantitative data analyses were run by SN, while qualitative data analyses were run by both JY and SN. JY and SN drafted the manuscript and participated in the interpretation of the results. The final manuscript was read and approved by both JY and SN.

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Declaration of GenAI and AI-Assisted Technologies

During the preparation of this work, the authors used ChatGPT powered by GPT-5.2 in order to improve the readability of the manuscript. After using this tool/service, the authors reviewed and edited the content as needed and take full responsibility for the content of the published article.

Ethics Approval and Consent to Participate

This study was approved by the Ethics Committee of Tokyo University of Foreign Studies (approval no. 2025-001). All participants provided written informed consent prior to enrollment and data collection in the study.

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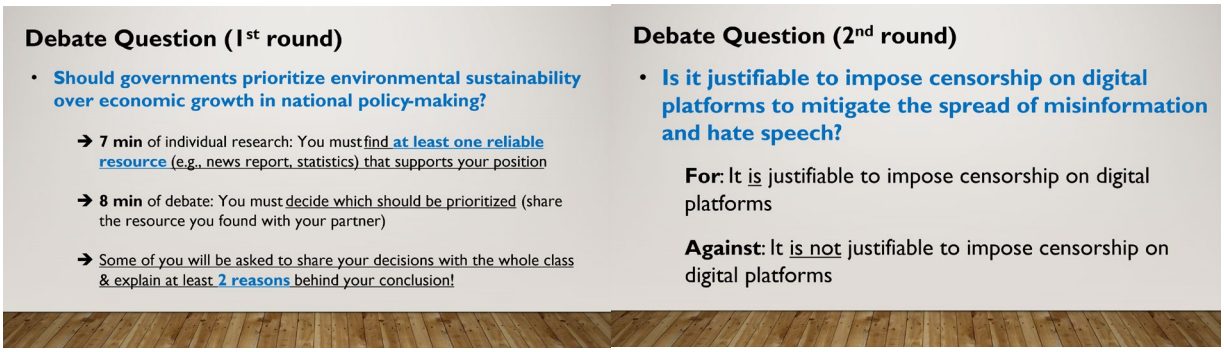
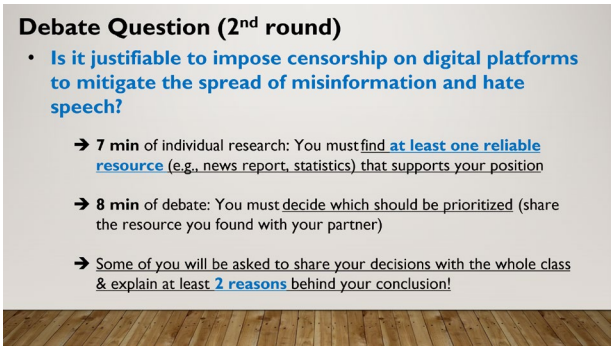
APPENDICES

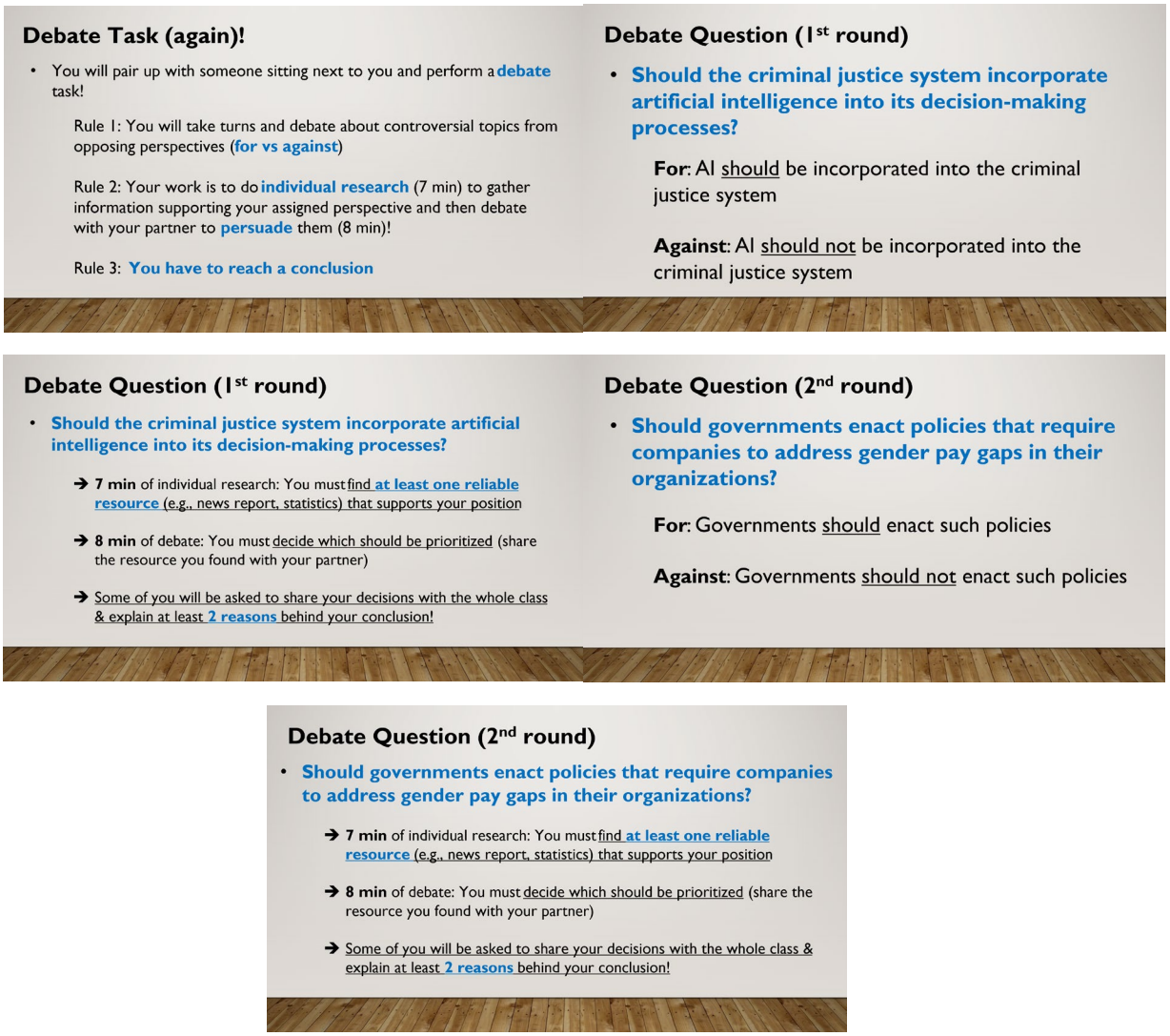
APPENDIX A. Slides Outlining Instructions for Tasks A and B.

Task A





Task B


Debate Task (again)!
• You will pair up with someone sitting next to you and perform a debate task!
Rule 1: You will take turns and debate about controversial topics from opposing perspectives (for vs against)
Rule 2: Your work is to do individual research (7 min) to gather information supporting your assigned perspective and then debate with your partner to persuade them (8 min)!
Rule 3: You have to reach a conclusion
Debate Question (1st round)
• Should the criminal justice system incorporate artificial intelligence into its decision-making processes?
For: AI should be incorporated into the criminal justice system
Against: AI should not be incorporated into the criminal justice system
Debate Question (1st round)
• Should the criminal justice system incorporate artificial intelligence into its decision-making processes?
➔ 7 min of individual research: You must find at least one reliable resource (e.g., news report, statistics) that supports your position
➔ 8 min of debate: You must decide which should be prioritized (share the resource you found with your partner)
➔ Some of you will be asked to share your decisions with the whole class & explain at least 2 reasons behind your conclusion!
Debate Question (2nd round)
• Should governments enact policies that require companies to address gender pay gaps in their organizations?
For: Governments should enact such policies
Against: Governments should not enact such policies
Debate Question (2nd round)
• Should governments enact policies that require companies to address gender pay gaps in their organizations?
➔ 7 min of individual research: You must find at least one reliable resource (e.g., news report, statistics) that supports your position
➔ 8 min of debate: You must decide which should be prioritized (share the resource you found with your partner)
➔ Some of you will be asked to share your decisions with the whole class & explain at least 2 reasons behind your conclusion!

APPENDIX B. ER Strategy Session Slides and Worksheet.

Slides

Worksheet

Name:

※You are going to submit this document at the end of the class.

ER (emotion regulation) strategies

Things we think or do to increase our enjoyment

タスクをより楽しむための工夫

タスクがもっと楽しくなる「考え・考え方」や「行動」

To boost my enjoyment in performing the debate task, I can use the following ER strategies:

APPENDIX C. ER Strategy Session Slides and Worksheet.

Pre-Task Enjoyment

I think I'll enjoy the task.

I look forward to performing the task.

I think I'll be motivated to perform the task because it is exciting.

I think I'll enjoy performing the task so much that I will get energized.

During-Task Enjoyment

I enjoyed the task.

The task was fun.

I felt motivated to perform the task because it was exciting.

I enjoyed performing the task so much that I got energized.

Perceived Effectiveness of ER Strategy Session

Please rate the effectiveness of the session you completed before completing the task.

APPENDIX D. Perceived Benefits of Enjoyment-Enhancing Strategies.

Category	Employed strategy	*n*	Benefits
Competence Building	Prepare a specific plan for what I am going to say during the task	2	Help complete the task without panicking Reduce anxiety
	Prepare visual aids (e.g., tables, graphs, slides)	2	Allow smooth communication Help convey ideas that are difficult to express in English Help organize supporting information Help persuade the partner more effectively Increase motivation because of perceived practicality
	Prepare in detail	1	Allow smooth production of English Build confidence
	Search multiple sources to gather supporting information	1	Help provide opinions with robust evidence
Positive Environment Building	Sit face to face	2	Allow smooth communication Help convey ideas that are difficult to express in English
Task Completion	Nod to what the partner says	1	Avoid feelings of discomfort Promote smooth decision-making
	Show responsiveness	1	Avoid feelings of discomfort Promote smooth decision-making
	Speak as if I am talking with a friend	1	Help listen attentively to the partner's opinions Help convey ideas accurately
	Use prior knowledge	1	Help free up the cognitive load and direct more attention to the conversation and the partner's reactions
Task Winning	Provide opinions clearly	1	Help provide opinions from diverse perspectives
	Do not bend my opinions	1	Help develop concrete ideas for winning the debate
Positive Framing	Think about the benefits of performing the task (e.g., grade, skill development)	2	Help reframe the rule to reach a conclusion during the debate in a more positive manner Increase motivation because of perceived task relevance
	Try to think that it is fine to make mistakes	2	Help create a mindset to speak proactively Reduce feelings of embarrassment when speaking in English
	Try to think that English is fun	1	Help enjoy communication in English Reduce the sense of being compelled to complete the task

Note. Perceived benefits were provided by 10 participants in the treatment group who employed enjoyment-enhancing strategies; *n* = number of participants who mentioned the benefits.

APPENDIX E. Perceived Benefits of the ER Strategy Session.

Perceived effectiveness	*n*	Reasons
It was very effective	1	*Positive*
		Allowed to perform the task in a meaningful manner
It was effective	5	*Positive*
		Allowed to participate in the task more actively
		Allowed to prepare for the debate
		Allowed to realize important values and previously unnoticed ideas by listening to friends' strategies
		Helped enjoy the task more
		Generated strategies that could be used in the future
It was somewhat effective	7	*Positive*
		Allowed to perform the task with confidence
		Helped enjoy the task more
		Negative
		Did not employ any strategies
		Have never paid attention to using strategies during tasks
		Struggled to generate useful strategies
It was not so effective	5	*Negative*
		Did not employ any strategies
		Concentrated too much on speaking in English
It was not effective	2	*Negative*
		Did not employ any strategies
		Generated a strategy that did not apply to the debate task
It was not effective at all	3	*Negative*
		Did not employ any strategies

Note. Benefits and reasons were provided by 23 participants in the treatment group; *n* = number of participants who rated the effectiveness of the ER strategy session correspondingly.

APPENDIX F. Perceived Delayed Impact of the ER Strategy Session.

Perceived delayed impact	*n*	Reasons
Positive	8	Helped enjoy the task more
		Reused the previously generated strategies
Negative	9	Did not employ any strategies
		Did not prefer serious task topics
		Did not think that enjoyment would increase if a similar task is repeated
		Did not have the mental capacity to employ strategies
		Have never paid attention to using strategies during tasks
		Struggled to convey ideas in English
		Struggled to focus on the task
		Struggled to generate useful strategies

Note. *n* = number of participants who provided comments within each category; Although 23 participants commented, we were only able to list a limited number of responses because some participants appeared to have misinterpreted the instructions for the open-ended question and provided irrelevant responses.

APPENDIX G. Participants' Suggestions for Improving the ER Strategy Session.

Categories	*n*	Concrete Suggestions
Modify Session Implementation	12	Employ a brainstorming format
		Implement the session every week
		Increase the time for peer sharing
		Promote learners to generate specific types of strategies and not others
		Provide example strategies beforehand
Modify Task Implementation	6	Invite a third person to decide the winner of the debate
		Provide detailed task instructions
		Provide examples of supporting information
		Provide sufficient time for task completion
		Provide planning time
		Provide time for pairs to get to know each other
Modify Task Design	4	Adopt tasks with casual topics
		Adopt tasks with interesting topics
		Allow flexibility
		Avoid debates
Foster a Positive Classroom Atmosphere	1	Foster an environment where making mistakes in English is acceptable
Raise L2 Learners' Awareness of Emotion Regulation Strategies	1	Raise awareness among L2 learners that a concept called emotion regulation strategies exists

Note. *n* = number of participants who provided suggestions within each category; Although 23 participants in the treatment group provided suggestions, the sum does not add up to 23 because participants provided multiple suggestions.