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Emotion Labeling and Somatic Experience: A Linguistic Anthropological Study of How the Presence vs. Absence of 'Sadness' Words Alters Autonomic Arousal in Japanese and American Speakers

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Abstract:

This review critically evaluates the fictional target study, "Emotion Labeling and Somatic A Linguistic Anthropological Study of How the Presence vs. Absence of 'Sadness' Words Alters Autonomic Arousal in Japanese and American Speakers," which reported that American speakers exhibit higher galvanic skin response (GSR) when explicitly asked "How sad do you feel?" whereas Japanese speakers show higher GSR when asked the open ended "How do you feel?" The review assesses the study's theoretical grounding in linguistic relativity, emotion labeling, and cultural display rules, synthesizes relevant supporting and contradictory evidence, and identifies methodological limitations. Key critiques (a) lack of translation equivalence between "sadness" and kanashisa; (b) conflation of lexical absence with pragmatic avoidance, given Japanese's multiple sadness related terms (setsunai, aware); (c) failure to control for baseline autonomic differences and respiration during HRV recording; and (d) a restricted sample of young university students. The review concludes that while the study offers provocative evidence for culture–language–body interactions, it overclaims lexical causality. Alternative interpretations cultural display rules, somatic metaphor use, and reversed causal direction (autonomic changes preceding lexical access) remain equally plausible. for replication include implicit measures (lexical decision, emotional Stroop), a third language group (e.g., German with Traurigkeit), and non word controls. Clinical implications highlight risks of cross cultural depression assessment using direct sadness labeling, which may underestimate distress in Japanese patients due to culturally cued suppression.

Keywords:
linguistic relativity; emotion labeling; autonomic arousal; cross cultural psychology; sadness; Japanese; display rules

I. Introduction

1.1 Hook: The Perennial Question – Does Language Shape Emotional Experience, or Only Describe It?

For over half a century, the relationship between language and emotion has occupied a central, often contentious, position in the cognitive and anthropological sciences. On one side lies the Universalist position: emotions are biologically hardwired, pan-cultural phenomena, and language merely labels pre-existing affective states (Ekman, 1992). On the other side stands the linguistic relativity hypothesis, which asserts that the categories made available by one's native language actively shape and in some views, constitute emotional experience (Lucy, 1997). Between these poles lies a more nuanced question: does having a word for "sadness" change not only how we think about sadness, but also how our bodies respond to sad events? If language penetrates somatic experience, then the mere presence or absence of an emotion word could

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alter autonomic nervous system activity provocative claim that challenges the long-held boundary between semantics and physiology.

1.2 Brief Summary of the Target Article (Fictional)

The target article, "Emotion Labeling and Somatic Experience: A Linguistic Anthropological Study of How the Presence vs. Absence of 'Sadness' Words Alters Autonomic Arousal in Japanese and American Speakers" (hereafter, Yamamoto & Chen, 2022, for illustrative purposes), directly tests this claim. The study recruited 120 healthy monolingual adults: 60 native Japanese speakers living in Tokyo and 60 native American English speakers living in Chicago, balanced for gender and aged 20–35 years. Participants underwent an emotion recall task while physiological recording measured galvanic skin response (GSR) and heart rate variability (HRV). The critical manipulation was the presence versus absence of the word "sad" (or its Japanese equivalent kanashii) during self-labeling: in the "word present" condition, participants were asked, "How sad do you feel?"; in the "word absent" condition, they were asked, "How do you feel?" without any explicit emotion vocabulary provided. The study reported that American speakers showed significantly higher GSR (indicating sympathetic arousal) when the word "sad" was present, whereas Japanese speakers showed higher GSR when the word "sad" was absent. The interaction was statistically robust, $F(1, 116) = 8.42$, $*p* < .01$.

1.3 Problem Statement

While the target study offers innovative and timely evidence for linguistic relativity in the somatic domain, two central problems weaken its interpretation. First, the operationalization of "absence of sadness words" conflates two conceptually distinct phenomena: (a) a true lexical gap (a language that has no word for sadness) and (b) pragmatic avoidance (speakers choose not to use an existing word due to cultural display rules or politeness norms). Japanese has a rich lexicon for sadness-related states, including kanashisa (sadness), setsunasa (heartache), and aware (a melancholic appreciation of transience). Thus, the "absence" condition for Japanese speakers is not a linguistic absence but a pragmatic one critical confound that the authors did not adequately address. Second, the study's autonomic measures, though well-recorded, lack sufficient control for individual differences in interoceptive sensitivity (i.e., the ability to perceive internal bodily states), which is known to vary systematically across cultures and to moderate the relationship between emotion labeling and physiological response (Garfinkel et al., 2015). Without such controls, it remains unclear whether observed GSR differences reflect language-driven autonomic change or pre-existing differences in how Japanese and American participants attend to and report bodily feelings.

1.4 Research Objective, Significance, and Roadmap of the Review

The objective of this review is threefold: (1) to critically evaluate the theoretical foundations and methodological rigor of the target study, (2) to situate its findings within the broader literature on linguistic relativity, emotion labeling, and autonomic psychophysiology, and (3) to propose specific recommendations for replication and extension that disentangle lexical gaps from pragmatic avoidance. The significance of this review lies in its potential to refine how cross-cultural researchers operationalize "emotion word availability" and to highlight the importance of interoception as a moderator of language–body interactions. The review proceeds as follows: Section 2 provides a theoretical background on linguistic relativity, emotion labeling as a physiological regulator, cross-cultural emotion concepts (Japanese aware vs. American "sadness"), and autonomic arousal as a measure of emotional embodiment. Section 3 summarizes the target study's research questions, participants, procedure, and key findings.

Section 4 (implied for later pages) would offer methodological critique and conclusions, though the present document focuses on the first three sections as requested.

1.5 Theoretical Background

a. Linguistic Relativity / Sapir Whorf Hypothesis

The linguistic relativity principle, often associated with Edward Sapir and Benjamin Whorf, holds that the structure of a language influences its speakers' cognition and perception. In its "strong" form (linguistic determinism), language constrains what can be thought; in its "weak" form (linguistic relativity), language habits predispose speakers toward certain modes of attending and categorizing (Lucy, 1997). For emotion, the relativistic claim is that speakers of languages with different emotion vocabularies may experience and remember affective events differently. Casasanto (2008) provided compelling evidence for relativity in temporal reasoning, showing that Greek speakers (who use spatial metaphors of "front" for the past) and English speakers (who use "front" for the future) differ in their implicit mental timelines. Extending this to emotion, the target study hypothesizes that the availability of an explicit "sadness" category—common in English but pragmatically downregulated in Japanese should produce measurable differences in autonomic arousal.

b. Emotion Labeling as a Cognitive and Physiological Regulator

A substantial body of research demonstrates that putting feelings into words—a process termed affect labeling can downregulate emotional responding. Lieberman et al. (2007) showed that labeling negative affective images reduces amygdala activation and increases activity in right ventrolateral prefrontal cortex, a region implicated in cognitive control. Torre and Lieberman (2018) further argued that affect labeling acts as an implicit form of emotion regulation, distinct from reappraisal or suppression, and that its effects can be observed in peripheral physiology: labeling typically decreases sympathetic arousal (e.g., lower skin conductance) and may increase parasympathetic tone. However, nearly all of this research has been conducted with Western, English-speaking samples. The target study flips this logic: instead of using labeling to reduce arousal, they ask whether the mere presence of a sadness word (rather than the act of labeling per se) differentially primes autonomic responses across cultures. This is a novel extension, but it requires careful disentanglement of labeling's regulatory effects from cultural priming effects.

1.6 Cross Cultural Emotion Concepts: Japanese Aware, Kanashisa vs. American "Sadness"

Emotion concepts are not simple translations across languages. In English, "sadness" is typically defined as a discrete, negative, low-arousal emotion, often elicited by loss or failure (Russell, 1991). In Japanese, the closest term kanashisa also conveys sadness but carries additional connotations of helplessness and longing. More distinct is mono no aware (literally "the pathos of things"), an aesthetic-emotional concept referring to a gentle sadness or bittersweet appreciation of impermanence (Mesquita & Karasawa, 2002). Unlike American sadness, which is often avoided or actively coped with, aware can be a valued, even pleasurable, melancholic state. Mesquita and Karasawa (2002) found that Japanese participants reported less intense and shorter-lasting sadness than American participants in response to negative events, but they also reported more mixed feelings (e.g., sadness intertwined with gratitude). This cultural script suggests that when Japanese speakers are explicitly asked "How sad do you feel?" they may activate a different semantic and somatic network than when they are asked the more open-ended "How do you feel?" In the latter, they might spontaneously access aware or setsunasa concepts that do not map cleanly onto "sadness" and that may produce distinct autonomic profiles.

1.7 Autonomic Arousal as a Measure of Emotional Embodiment

The use of GSR and HRV as indices of emotional arousal has a long history in psychophysiology. GSR reflects sympathetic nervous system activity related to emotional intensity, regardless of valence (Kreibig, 2010). HRV, particularly high-frequency HRV, indexes parasympathetic (vagal) tone and is associated with emotion regulation capacity. Kreibig's (2010) meta-analytic review found that sadness, compared to other negative emotions, produces moderate sympathetic activation (increased GSR) and decreased HRV, but these effects are highly context-dependent. Critically, autonomic responses are not invariant markers of discrete emotions; they are shaped by appraisal, cultural display rules, and the demand characteristics of the experimental setting. For cross-cultural comparisons, baseline differences in autonomic tone (e.g., lower resting HRV in East Asian samples) and differences in interoceptive accuracy (Garfinkel et al., 2015) must be controlled. The target study's reliance on raw change scores without covarying baseline physiology or interoceptive ability thus represents a significant theoretical limitation, as any observed interaction could reflect pre-existing somatic differences rather than language-induced changes.

II. Review of Literatures

2.1 Research Questions and Hypotheses

The target study asked one primary research question: Does the presence versus absence of an explicit sadness word (English "sad" / Japanese kanashii) during self-labeling differentially affect autonomic arousal in Japanese and American speakers? Based on linguistic relativity and cultural differences in emotion concepts, the authors proposed two directional hypotheses:

a. H1 (American speakers): Presence of the word "sad" will increase autonomic arousal (higher GSR, lower HRV) compared to its absence, because American English routinely uses explicit sadness labels and such labeling primes a discrete, high-arousal sadness script.
b. H2 (Japanese speakers): Absence of the word "sad" will produce higher autonomic arousal (or a different pattern) compared to its presence, because Japanese speakers avoid explicit sadness labeling due to cultural norms valuing emotional moderation; the absence condition allows access to somatic markers of non-labeled sadness (e.g., aware).

2.2 Participants

The study recruited 120 participants (60 per language group). Japanese participants were monolingual native speakers recruited from the Tokyo metropolitan area; American participants were monolingual native English speakers from the Chicago metropolitan area. Groups were matched for gender (50% female each) and age (range 20–35 years, M = 26.4, SD = 4.1). Exclusion criteria included any current or past psychiatric or neurological disorder, regular use of psychotropic medication, and self-reported bilingualism. All participants provided written informed consent, and the study was approved by the institutional review boards of the authors' affiliated universities.

2.3 Procedure

The study employed a 2 (language group: Japanese vs. American) × 2 (labeling condition: word present vs. word absent) between-subjects design. Participants were randomly assigned to one of the two labeling conditions.

Upon arrival, participants were seated in a sound-attenuated room, and sensors were attached for continuous recording of GSR (using Ag/AgCl electrodes on the palmar surface of the non-dominant hand) and HRV (using a three-lead electrocardiogram). After a 5-minute

baseline rest period, participants completed an emotion recall task: they were asked to think of a recent personal event that made them feel "a negative emotion" (condition-neutral prompt) and to write a brief description. Immediately after recall, participants in the word present condition were asked: "How sad do you feel right now?" (English) or "Ima, kanashii to dono kurai kanjimasu ka?" (Japanese). Participants in the word absent condition were asked: "How do you feel right now?" (English) or "Ima, do no yō na kimochi o kanjimasu ka?" (Japanese). GSR and HRV were recorded for 30 seconds following the prompt. At the end of the session, participants completed a brief manipulation check and a self-report mood scale.

2.4 Key Findings

The authors reported a statistically significant interaction between language group and labeling condition on GSR (but not on HRV). A 2 × 2 ANOVA revealed $F(1, 116) = 8.42$, $p < .01$, partial $\eta^2 = .068$. Simple effects analyses (using independent-samples *t*-tests with Bonferroni correction) showed:

a. For American participants, GSR was significantly higher in the word present condition ($M = 1.24$ μS, $SD = 0.31$) than in the word absent condition ($M = 0.91$ μS, $SD = 0.28$), $t(58) = 4.31$, $p < .001$, Cohen's *d* = 1.12.
b. For Japanese participants, GSR was significantly higher in the word absent condition ($M = 1.18$ μS, $SD = 0.33$) than in the word present condition ($M = 0.85$ μS, $SD = 0.29$), $t(58) = 4.07$, $p < .001$, Cohen's $d = 1.06$.
c. No main effect of language group or labeling condition reached significance (*p* > .10).

HRV (high-frequency power) showed no significant main or interaction effects, although the authors noted a non-significant trend toward lower HRV in the American word present condition. The authors interpreted the GSR findings as evidence that the presence of an explicit sadness word primes a somatic sadness response in Americans, whereas its absence paradoxically primes somatic markers of sadness in Japanese speakers, possibly because the open-ended prompt ("How do you feel?") allows access to culturally elaborated sadness concepts (e.g., aware) that are not named by kanashii. This pattern was framed as "somatic marking of non labeled sadness."

2.5 Methodological Critique

While the target study presents provocative findings, its methodological framework contains several critical weaknesses that undermine the validity and interpretability of its central claims. This section evaluates four principal areas of concern: translation and stimulus equivalence, the operationalization of word "absence," autonomic measurement limitations, and sample characteristics. Each critique identifies specific confounds that future replications must address.

2.6 Translation and Stimulus Equivalence: "Sadness" ≠ Kanashisa

The most foundational threat to the target study's validity lies in the assumption of semantic equivalence between the English "sadness" and the Japanese kanashisa. Over eighty percent of basic emotion terms exhibit only partial translation equivalence when moving between distantly related languages, a pattern that reflects fundamental differences in emotion term granularity and morpho-semantic structure across linguistic systems (Ogrodniczuk et al., 2023, pp. 4–5). The English word "sadness" typically denotes a discrete, negatively valenced, low-arousal emotion elicited by personal loss or failure, and often triggers active coping or social support seeking (Russell, 1991). In contrast, the Japanese semantic field surrounding kanashisa includes layered connotations of helplessness, longing, and aesthetic melancholy. More distinctively, mono no aware concept with no direct English equivalent—refers to a gentle, even pleasurable sadness that arises from the bittersweet appreciation of impermanence (Mesquita &

Karasawa, 2002). Importantly, native Japanese speakers often spontaneously access aware or setsunasa when prompted with open-ended questions, rather than the narrower kanashii.

The target study's translation procedure fails to establish functional equivalence basic precondition for any cross-cultural comparison (van de Vijver & Leung, 2021). Functional equivalence requires that stimuli evoke comparable psychological processes across groups; here, the word "sad" may activate a clinically relevant, potentially pathologized state in Americans, whereas the same prompt may activate an aestheticized, culturally valued melancholy in Japanese speakers. This confound fundamentally alters the interpretation of any autonomic differences. Higher GSR in Japanese participants during the "word absent" condition could reflect activation of the aware script, which may carry a distinct autonomic signature from that of prototypical sadness. Without demonstrating that "How sad do you feel?" and "Kanashii to dono kurai kanjimasu ka?" elicit comparable appraisal patterns, the study's translation equivalence remains unsubstantiated.

A further complication involves the conflation of valence and arousal. Research on autonomic specificity in emotion has shown that GSR primarily indexes sympathetic arousal regardless of valence, whereas the interpretation of HRV in sadness contexts requires careful disentanglement of parasympathetic contributions (Kreibig, 2010). If the Japanese kanashisa script carries a lower arousal but higher cognitive appraisal load than the American "sadness" script, any observed GSR difference could reflect appraisal-driven sympathetic activation rather than emotion-specific physiology. The target study does not include a neutral control condition that equates for cognitive demand without emotion content, leaving this confound unresolved.

2.7 Absence of a Word as a Manipulation: Lexical Gap or Pragmatic Avoidance?

The study's central manipulation presence versus absence of an explicit sadness word rests on a critical conceptual conflation. "Absence" can mean either that a language genuinely lacks a lexical item for a given emotion concept (a true lexical gap) or that speakers of a language possess the word but avoid using it due to cultural norms, politeness strategies, or display rules (pragmatic avoidance). Japanese is not a language without a sadness lexicon; on the contrary, it possesses a rich and nuanced set of sadness-related terms, including kanashii (sad), setsunai (heartaching, poignant), and aware (a melancholic empathy). As Maynard (2005, cited in Shibata, 2020) notes, words such as kanashii are important in everyday Japanese conversation, but communicating emotions effectively also requires the use of expressive strategies that modulate direct emotional disclosure. The "absence" condition in the target study therefore does not create a true lexical absence; rather, it removes an explicit prompt, allowing Japanese speakers to avoid an expression that may be culturally marked as too direct or self-disclosing.

This distinction has profound implications. Decades of cross-cultural research have established that East Asian cultural contexts, including Japan, encourage emotion suppression and the downregulation of negative emotional displays (Matsumoto et al., 2008; Kim et al., 2012). More recently, Kiyonari et al. (2024) demonstrated that native Japanese participants who reported high interdependent self-construal exhibited significantly reduced neural markers of emotional arousal when instructed to suppress their reactions to unpleasant stimuli, an effect that was absent in participants with lower interdependence scores. This suggests that for many Japanese speakers, suppressing explicit emotion labeling is not a passive default but an active, culturally reinforced regulatory strategy.

Consequently, the target study's higher GSR in Japanese participants during the "word absent" condition may not reflect "somatic marking of non-labeled sadness," as the authors claim. An equally plausible interpretation is that Japanese speakers in the "word present"

condition successfully suppressed sympathetic arousal through culturally learned regulatory mechanisms (consistent with Kiyonari et al., 2024), whereas those in the "word absent" condition received no explicit prompt to regulate, leading to a more spontaneous and thus higher autonomic response. This alternative hypothesis directly inverts the authors' causal arrow, shifting the explanatory burden from lexical availability to culturally shaped emotion regulation strategies.

2.8 Autonomic Measurement Limitations: Baseline Confounds and Respiratory Artifacts

The target study's reliance on GSR and HRV as markers of emotional arousal, while methodologically standard, suffers from two significant limitations that the authors did not adequately address: the absence of baseline correction for cultural differences in tonic arousal, and the lack of respiratory control during HRV recording.

First, research has documented systematic cross-cultural differences in baseline autonomic tone, with East Asian samples often exhibiting lower resting HRV and higher baseline sympathetic tone compared to Western samples (Thayer & Lane, 2000; Kreibig, 2010). The target study reports raw change scores from baseline but does not specify whether baseline measures differed significantly between Japanese and American participants, nor does it include baseline values as covariates in the ANOVA. If Japanese participants began with higher baseline sympathetic arousal, any observed group difference in GSR change scores could reflect this pre-existing difference rather than a genuine language-induced effect. Proper cross-cultural psychophysiology requires not only baseline recording but also statistical control for baseline values ideally through analysis of covariance or percentage-change transformations (Quintana & Heathers, 2014).

Second, HRV is profoundly sensitive to respiratory parameters; changes in breathing rate and depth directly affect high-frequency HRV components, which are primarily mediated by respiratory sinus arrhythmia (Laborde et al., 2017). Quintana and Heathers (2014, pp. 4–5) emphasize that "both breathing and blood pressure regulation have their own relationship to social, emotional, and cognitive experiments" and that experiments often have "poor internal and external controls" for respiration. Without monitoring or controlling for respiration, such as through paced breathing, respiratory belt recording, or statistical correction, HRV differences between conditions cannot be unambiguously attributed to emotion-specific autonomic changes rather than to condition-dependent alterations in breathing. The target study reports no respiratory monitoring whatsoever, and the absence of significant HRV findings (despite robust GSR effects) may reflect precisely this confound: GSR is less directly influenced by respiration than is HRV, but HRV effects may have been obscured by uncontrolled respiratory variation.

Furthermore, the study's 30 second post prompt recording window is exceptionally short for reliable HRV assessment. Standard guidelines recommend at least 60–120 seconds of artifact-free data for frequency-domain HRV analysis (Laborde et al., 2017). The study's brief window, combined with the lack of respiration control, likely introduced excessive noise, potentially explaining the null HRV results. The authors' interpretation that HRV "showed no significant effects" may therefore represent a Type II error rather than a true absence of HRV modulation.

4.4 Sample Characteristics: University Students and Generational Confounds

The target study's sample consisted exclusively of young adults aged 20–35 recruited from university settings in Tokyo and Chicago. This sampling strategy introduces two related threats to external validity: age restriction and educational homogenization.

First, young adults are not representative of the broader Japanese population with respect to emotion vocabulary use and display rules. Research on age-related changes in emotion regulation indicates that older Japanese adults differ systematically from younger adults in their emotional coherence patterns (Nakamura & Ishii, 2019). Specifically, Japanese older adults from generations that place greater emphasis on traditional interdependent values may suppress facial and verbal expressions of negative emotion more strongly than young adults, and they may also access culturally elaborated sadness concepts such as mono no aware more freely (Miyamoto et al., 2017). In contrast, younger Japanese university students, having been exposed to globalized media and Western psychological frameworks, may use kanashii more readily and with less pragmatic avoidance than their parents' or grandparents' generations. The target study's exclusive reliance on a young, highly educated, urban sample thus creates a "WEIRD" (Western, Educated, Industrialized, Rich, Democratic) bias even within the Japanese group (Henrich et al., 2010). The extent, to which the findings generalize to older Japanese adults, or to Japanese speakers in rural or non academic settings, remains entirely unknown.

Second, the absence of older Japanese participants prevents any analysis of how life experience and socialization history moderate the relationship between labeling condition and autonomic arousal. Kiyonari et al. (2024) found that the efficacy of expressive suppression in Japanese participants was significantly predicted by interdependent self-construal, a cultural value orientation that tends to be stronger in older generations and in individuals with more traditional upbringing. By restricting the sample to university students, the target study implicitly assumes that all Japanese speakers of working age share a uniform relationship to kanashii labeling—a demonstrably false assumption.

Third, the American comparison group is also problematic. University students in Chicago are neither representative of all American English speakers nor matched to Japanese participants on socioeconomic status, family background, or regional variation in emotion language use. Differences in GSR between groups could partially reflect differences in stress exposure (academic pressure, financial concerns) or in baseline anxiety levels, which are known to vary systematically between Japanese and American student populations (Mesquita & Karasawa, 2002). The study reports no measures of trait anxiety, depression symptoms, or daily stress, leaving these alternative explanations uncontrolled.

In sum, the target study's methodological limitations spanning translation equivalence, the conflation of lexical and pragmatic absence, unmonitored respiratory confounds, and a restricted young-adult sample substantially weaken its evidentiary foundation. While the observed interaction is statistically robust, its interpretation as evidence that "absence of a sadness word alters autonomic arousal" overinterprets correlational data that are equally or better explained by cultural differences in baseline arousal, emotion regulation strategy, respiratory artifacts, and sample selection biases. Future research must address these confounds before any firm conclusions about lexical causality can be drawn.

III. Results and Discussion

3.1 Integration with Existing Literature

The findings of the target study that the presence versus absence of an explicit sadness word differentially alters autonomic arousal in Japanese and American speakers neither emerge from nor challenge a vacuum. Rather, they intersect with three substantial bodies of literature: (a) studies that support the constitutive role of language in emotional physiology, (b) contradictory evidence that suggests language may not be necessary for basic affective processing, and (c) linguistic anthropological perspectives that situate emotion terms within culturally embedded narrative practices. Juxtaposing the target study against these literatures reveals both its theoretical contributions and its unresolved tensions.

3.2 Studies That Support the Finding

The target study's central claim that emotion words go beyond communicating emotion to constitute somatic experience finds robust support in the psychological constructionist literature, particularly the Conceptual Act Theory (CAT) articulated by Barrett (2017) and her colleagues. According to CAT, emotions are not hardwired, biologically basic responses but are actively constructed in the moment when core affective sensations (e.g., pleasant versus unpleasant arousal) are categorized using conceptual knowledge, much of which is acquired and scaffolded through language (Lindquist et al., 2015). A key prediction of this model is that emotion words should influence not only how people report feelings but also how their bodies respond to affective stimuli. Lindquist et al. (2015) review evidence from social cognitive, neuropsychological, cross cultural, and neuroimaging studies showing that emotion words help constitute emotional perceptions and experiences, and that semantic loss such as in patients with semantic dementia impairs the ability to perceive emotions in others, even when basic affect perception remains intact. The target study extends this line of reasoning into the domain of autonomic physiology, providing a novel demonstration that lexical availability modulates sympathetic arousal during emotion recall.

Cross culturally, the target study's Japanese–American comparison aligns with a rich tradition of research documenting systematic cultural differences in emotion appraisal, attribution, and regulation. Imada and Ellsworth (2011) demonstrated that Americans and Japanese experience different emotions in response to comparable situations because of culturally divergent causal attributions. In success situations, Americans reported stronger self agency emotions (e.g., pride), whereas Japanese reported stronger situation agency emotions (e.g., luck). Crucially, when Japanese participants were experimentally induced to make the same attribution as Americans, cultural differences in emotion became non significant, suggesting that appraisal patterns not emotion categories per se drive cross cultural divergence. The target study extends this logic to the lexical level: the presence or absence of a sadness word may function as a semantic cue that primes culturally specific appraisal schemas. For Americans, "sadness" primes a self focused, agentic appraisal of personal loss; for Japanese, kanashisa is less frequently used, and its absence allows alternative somatic markers to emerge.

More direct support for the target study's physiological findings comes from recent work on Japanese emotion suppression. Kiyonari et al. (2024) recorded EEG from Japanese participants instructed to suppress their emotional reaction to unpleasant images. Participants with high interdependent self construal cultural orientation that values group harmony and emotional moderation exhibited reduced neural markers of emotional arousal during suppression, consistent with the idea that Japanese speakers actively downregulate explicit negative emotion labeling. From this perspective, the target study's finding that Japanese

participants showed higher GSR in the word absent condition can be reinterpreted: in the absence of an explicit sadness prompt, Japanese participants had no cue to initiate culturally learned suppression, allowing spontaneous autonomic arousal to emerge. Conversely, in the word present condition, the prompt "kanashii?" may have served as a direct invitation to regulate, resulting in lower GSR. This interpretation is complementary to, rather than contradictory of, the authors' own "somatic marking" account.

3.3 Contradictory Evidence: Language as Not Necessary for Affect

Despite the growing evidence for linguistic relativity in emotion, a substantial counter literature suggests that basic affective processes operate independently of language. Barrett, Lindquist, and Gendron (2007) proposed the "language as context" hypothesis, which holds that language modulates emotion perception without being necessary for it. In their view, people can experience and perceive affect (i.e., core hedonic states of pleasure/displeasure and arousal) without linguistic mediation; language comes into play when those core affective states are categorized into discrete emotion categories such as "anger," "fear," or "sadness." In the target study's framework, this would imply that the GSR differences they observed might reflect changes in affect labeling (i.e., the act of consciously categorizing a feeling) rather than changes in affect itself. If true, then the "absence" manipulation may have altered participants' labeling strategies without fundamentally changing their underlying somatic state possibility the target study did not rule out.

A more fundamental challenge comes from developmental and comparative research. Newborn infants and non human animals exhibit clear affective responses (crying, withdrawal, approach) long before they acquire language, and these responses are mediated by subcortical circuits that do not require lexical access (LeDoux, 2012). Moreover, patients with global aphasia who have lost virtually all language ability still experience emotions and can recognize emotional facial expressions (Adolphs, 2017). These observations do not disprove the target study's findings after all, the study concerns adult speakers of intact language, not infants or aphasic patients but they temper strong claims that language is constitutive of emotion. A more measured interpretation is that language serves as a scaffold for the elaboration of emotion experience, particularly for complex, socially situated emotions such as sadness, which involve narrative self reflection and cultural meaning making.

The target study's null HRV findings further nuance this picture. If language fundamentally alters emotional embodiment, one might expect robust changes in both sympathetic (GSR) and parasympathetic (HRV) indices. That only GSR showed effects and those effects were relatively modest (partial $\eta^2 = .068$) suggests that language's influence on the autonomic nervous system may be limited to specific response channels or may be smaller in magnitude than the study's interpretation implies. As Kreibig (2010) notes, different autonomic measures track different aspects of emotion: GSR primarily indexes sympathetic arousal, whereas HRV is more sensitive to vagal regulation and cognitive load. The dissociation between these measures in the target study may indicate that the labeling manipulation altered emotional intensity (GSR) without fundamentally reorganizing regulatory processes (HRV).

3.4 Linguistic Anthropology Perspective: Emotion Terms Embedded in Narrative Practices

From a linguistic anthropological standpoint, the target study's experimental framework presenting isolated emotion words or their absence in a controlled laboratory setting—risks abstracting emotion terms from the narrative and interactional contexts in which they acquire meaning. Ochs and Schieffelin (1989), in their foundational article "Language Has a Heart,"

argued that emotion is not merely expressed but constituted through language in social interaction. They demonstrated across a range of societies (including Samoa, Papua New Guinea, and Euro American contexts) that the ways caregivers talk about feelings to children, the narrative structures used to recount emotional events, and the pragmatic norms governing emotion word use all shape not only how people talk about emotion but the very form that emotion takes in lived experience. From this perspective, the target study's focus on single word labeling ("sad" or its absence) is a methodological necessity for controlled experimentation but a theoretical simplification of how sadness words actually function in Japanese and American daily life.

In Japanese discourse, explicit sadness terms such as kanashii are not simply "used less often"; they are embedded in a complex system of linguistic ideologies, including honne (true feeling) versus tatemae (public face), and in narrative practices that privilege indirect expression, ellipsis, and somatic metaphor (Shibata, 2020). When a Japanese speaker says "mune ga kurushii" (my chest hurts) rather than "kanashii," she is not merely avoiding a word; she is invoking a culturally resonant model of emotion in which distress is localized in the body rather than named as a discrete psychological state. This somatic language is not a substitute for or a suppression of sadness—it is the expression of sadness in a culturally appropriate register. The target study's "word absent" condition, in which Japanese participants were simply asked "How do you feel?" without an emotion word prompt, may have inadvertently allowed such somatic narratives to emerge. If so, the higher GSR in that condition might reflect not the absence of a sadness word but rather the presence of a culturally sanctioned somatic idiom for distress an interpretation directly opposite to the authors' framing.

Ochs and Schieffelin (1989) further emphasize that emotion language is always embedded in local moral worlds. In American English, the question "How sad do you feel?" carries implicit norms about emotional disclosure, authenticity, and the desirability of articulating negative states. In Japanese, the same question may be experienced as mildly intrusive or inappropriate, prompting not authentic self report but rather a polite downregulation of disclosed intensity. The target study's use of a between subjects design (different participants in each labeling condition) prevents any analysis of how the same individual's physiological response changes when the same prompt is asked in different ways limitation that a within subjects design might have addressed. Future research inspired by linguistic anthropology would benefit from complementing physiological measures with detailed discourse analysis of participants' verbal responses, examining not just whether they use the word "sad" but how they narratively construct their emotional state in open ended responses.

3.5 Synthesizing the Evidence: Toward an Integrated Model

Taken together, the supporting, contradictory, and anthropological literatures suggest that the target study's findings are best interpreted within a moderate linguistic relativity framework: language influences emotional embodiment without fully determining it, and this influence is mediated by cultural narratives, pragmatic norms, and individual differences in interoception. The observed interaction Americans showing higher GSR when "sad" is present, Japanese showing higher GSR when it is absent is consistent with at least three distinct mechanisms: (a) a direct lexical effect (the word primes a culturally specific somatic script), (b) a pragmatic avoidance effect (Japanese participants suppress explicit labeling when cued by the word), and (c) a narrative elicitation effect (the open ended prompt allows Japanese participants to access somatic idioms that themselves carry autonomic load). Disentangling these mechanisms will require future studies that go beyond the presence/absence binary to examine the specific content of participants' verbal responses, the timing of autonomic changes relative to word

presentation, and the moderating role of individual differences in interoceptive sensitivity and cultural orientation.

The target study has made a valuable contribution by bringing psychophysiological methods to bear on a long standing question in linguistic anthropology and cultural psychology. Its findings are provocative, methodologically innovative, and broadly consistent with constructionist theories of emotion. However, as the contradictory evidence and anthropological critiques show, the interpretation of those findings remains underdetermined. Whether the study demonstrates that "absence of a sadness word alters autonomic arousal" or that "presence of a sadness word cues culturally learned suppression in Japanese speakers" depends on which theoretical lens one adopts plurality of explanations that the study's current design cannot resolve.

3.6 Discussion & Interpretation

The target study's central finding robust cross cultural interaction in which explicit sadness labeling increases autonomic arousal in American speakers but decreases it in Japanese speakers invites three levels of interpretation. This section first adjudicates between a linguistic relativity account and a cultural display rules alternative, then examines the conceptual problem of the "missing" sadness word, and finally situates the findings within embodied cognition models, where somatic changes may precede rather than follow lexical access.

a. Does the Study Demonstrate Linguistic Relativity or Cultural Display Rules?

The target study's authors frame their findings as evidence for linguistic relativity: the presence or absence of a word for "sadness" directly shapes physiological experience. However, an equally parsimonious and, in many ways, better supported interpretation invokes cultural display rules and emotion regulation norms that differ systematically between Japan and the United States. Display rules are culturally shared norms governing when, where and how emotions should be expressed or suppressed (Matsumoto et al., 2008). Extensive cross cultural research indicates that East Asian cultures, particularly Japan, place a premium on emotional moderation and the suppression of negative emotion displays to preserve social harmony (Kim et al., 2012). These norms are not merely behavioral; they penetrate subjective experience and physiological responding.

Kiyonari et al. (2024) provided direct neural evidence for this phenomenon: native Japanese participants who scored high on interdependent self construal (a cultural orientation that prioritizes group cohesion) exhibited a significantly reduced late positive potential (LPP), an EEG marker of emotional arousal when instructed to suppress their reactions to unpleasant images. Critically, this suppression effect was negligible for participants low in interdependent self construal, demonstrating that culturally acquired regulatory strategies are highly individual variable and can be experimentally observed at the neurophysiological level. The target study lacked any measure of interdependent versus independent self construal, leaving a key individual difference moderator entirely unexamined.

From a display rules perspective, the target study's pattern is reinterpretable as follows. In the word present condition ("How sad do you feel?"), Japanese participants receive a direct cultural cue: an explicit invitation to disclose negative emotion, which violates norms of emotional moderation. This cue activates culturally learned suppression, resulting in lower autonomic arousal (successful downregulation). In the word absent condition ("How do you feel?"), no such cue is present. Without an explicit prompt to regulate, Japanese participants default to a more spontaneous response, allowing higher sympathetic arousal to emerge precisely

what the target study observed. American participants, conversely, inhabit a culture that values emotional expressiveness and authenticity (Lee & Matsumoto, 2011). For them, the word present condition is congruent with cultural norms, facilitating open emotional expression and thus higher GSR, while the word absent condition may feel ambiguous or restrictive, dampening arousal.

Lee and Matsumoto (2011) directly compared Japanese and Korean emotional display rules and found that Japanese participants thought they should suppress emotions more than Koreans did, particularly in social contexts, and that these display rule differences were linked to judgments of others' emotional expressions. This suggests that suppression is not a passive absence of expression but an active, culturally valued strategy that Japanese speakers deploy when normatively cued.

Crucially, the linguistic relativity and display rules accounts are not mutually exclusive; they may operate in tandem. The presence or absence of a sadness word may itself function as a cultural display rule cue. In Japanese, the very act of asking "Kanashii?" in a laboratory setting may implicitly communicate a social demand for emotional disclosure, triggering the same regulatory processes that operate in everyday interactions. The target study's binary framing (linguistic relativity vs. cultural norms) is therefore a false dichotomy. A more integrated view holds that language provides one of the primary vehicles through which cultural display rules are transmitted, instantiated, and enacted in real time. The question is not whether language or culture drives the effect, but rather how linguistic structures and cultural norms mutually constitute each other in shaping somatic experience.

b. The Problem of the "Missing" Word: Japanese Has Multiple Sadness Subtypes

A second fundamental interpretive difficulty concerns the study's operationalization of "absence of sadness words." The target study treats Japanese as a language in which sadness words are effectively absent under the experimental manipulation. This is both empirically inaccurate and conceptually reductive. Japanese possesses a rich and semantically differentiated lexicon for sadness related states. The term setsunai (切ない), for instance, refers to an intense, heart aching sadness that intertwines physical and mental anguish, often arising from unrequited love or poignant beauty; it is not simply an intensifier of kanashii but a qualitatively distinct emotion concept (Sakaba, 2022). Kanashii (悲しい) itself denotes a more straightforward, direct sadness, while aware describes a gentle, bittersweet melancholy—an aestheticized appreciation of impermanence with no English equivalent (Mesquita & Karasawa, 2002).

When the target study's Japanese participants were asked in the word present condition, "Kanashii to dono kurai kanjimasu ka?" (How sad do you feel?), they may have experienced that question as narrowly specific referring only to prototypical kanashii rather than the broader, more diffuse sadness related space that includes setsunai and aware. In the word absent condition, when asked the open ended "How do you feel?" (Do no yō na kimochi o kanjimasu ka?), participants were free to access the entire semantic field of sadness related concepts. If setsunai or aware carry a different, perhaps higher autonomic load than kanashii (e.g., due to their greater cognitive emotional complexity or their blending of positive and negative valence), then the higher GSR observed in the word absent condition could reflect not the absence of sadness words but rather the presence of a richer, more complex sadness concept. The study's binary presence/absence framework collapses this semantic nuance into a single dimension, obscuring potentially critical variation.

Moreover, Japanese speakers routinely use somatic metaphors mune ga kurushii (my chest hurts), kokoro ga omoi (my heart is heavy) to express distress without deploying discrete emotion terms (Russell, 1991). These somatic idioms are not merely descriptive; they constitute the experience of sadness in a culturally resonant register. In the word absent condition, participants may have spontaneously generated such somatic narratives, and the physiological correlates of those narratives (e.g., chest tightness, shallow breathing) could directly contribute to the measured GSR increase. The target study's exclusive focus on a single lexical item (kanashii) vs. its absence thus misses the discursive reality of how Japanese speakers actually construct sadness in language: not by a binary choice between using or not using one word, but by navigating a richly structured semantic and pragmatic landscape.

Future research should move beyond the presence/absence paradigm. A finer grained design might compare three conditions: (a) explicit kanashii prompt, (b) open ended prompt without emotion words, and (c) a prompt that explicitly invites somatic metaphor ("Where in your body do you feel it?"). Linguistic analysis of participants' verbal responses could then examine whether GSR differences track specific lexical choices (e.g., use of setsunai vs. kanashii) and whether somatic metaphor use mediates the autonomic effect. Until such analyses are conducted, the claim that "absence of sadness words alters arousal" remains an oversimplification that conflates lexical absence with semantic richness.

c. Implications for Embodied Cognition: Autonomic Changes May Precede Lexical Access

The target study presupposes a particular causal direction: the presence or absence of a sadness word causes changes in autonomic arousal. This assumption from language to body aligns with the standard interpretation of affect labeling studies, in which putting feelings into words typically downregulates physiological and neural responses (Lieberman et al., 2007; Torre & Lieberman, 2018). However, a substantial body of work in embodied cognition and the neuroscience of emotion suggest that the causal arrow may run in the opposite direction, at least in part.

Antonio Damasio's somatic marker hypothesis provides a foundational challenge to the language first model. In Damasio's account, bodily sensations changes in heart rate, gut motility, skin conductance occur prior to and inform conscious emotional experience, not the other way around. The feeling of what happens in the body is the emotion; conscious labeling is a later, higher order cognitive process that may or may not follow. As Damasio (1999) argued, "the body, as represented in the brain, provides a scaffold for the construction of the sense of self," and "emotions are the result of a direct signal from the body" (p. 56). From this perspective, the target study's GSR differences could reflect pre existing somatic states that then influence how participants respond to the labeling question, rather than the labeling question itself causing the arousal.

In the context of cross cultural differences, this reversed causal order is particularly plausible. Japanese participants may have higher baseline interoceptive sensitivity or different patterns of somatic attention than American participants, independent of any lexical manipulation (Garfinkel et al., 2015). When asked an open ended question ("How do you feel?"), they may attend more readily to their bodily signals, producing a stronger GSR response. When asked a specific lexical question ("How sad do you feel?"), they may override that somatic attention with a conceptual response, reducing GSR. In this reinterpretation, the lexical manipulation does not cause the autonomic change; it modulates the degree to which

participants attend to or suppress pre existing somatic signals. The observed interaction is real, but the causal interpretation (language → body) may be incomplete or even reversed.

This alternative is not merely speculative. A growing literature on interoception the perception of internal bodily states has demonstrated systematic individual and cultural differences in how people detect, interpret, and report somatic signals (Garfinkel et al., 2015). Crucially, interoceptive accuracy (the ability to detect one's own heartbeat, for example) correlates with emotional intensity and with activity in anterior insular cortex, a brain region that integrates bodily signals into conscious feeling. The target study measured neither interoceptive accuracy nor interoceptive sensibility (self reported tendency to attend to bodily sensations), leaving a critical confound untouched. If Japanese participants, on average, have higher interoceptive accuracy than American participants' hypothesis that has received preliminary support then the observed GSR differences could be explained without invoking lexical effects at all.

The target study's null HRV findings add weight to this cautionary note. HRV is more directly tied to vagal regulation and cognitive control processes than GSR (Kreibig, 2010). If the labeling manipulation genuinely altered emotional embodiment in a fundamental way, one might expect to see changes in both sympathetic and parasympathetic channels. The dissociation (significant GSR effects, null HRV effects) is consistent with an alternative interpretation: the manipulation altered response bias or attention to bodily signals rather than core autonomic state. GSR is more sensitive to such attentional modulations than HRV, which tends to reflect more tonic regulatory processes.

d. Toward an Integrative Model

No single theoretical framework fully accounts for the target study's findings. Linguistic relativity, cultural display rules, semantic richness, and embodied cognition each capture part of the phenomenon. An integrative model would propose the following: The presence or absence of an explicit sadness word operates as a cultural semantic cue that differentially activates three interacting systems: (a) lexical semantic knowledge (what "sadness" or kanashii means), (b) pragmatic norms (whether it is appropriate to use such a word in this context), and (c) somatic attention (whether participants focus on bodily signals or override them with conceptual processing). In American speakers, the word "sad" activates a high arousal, expressively congruent script, leading to increased GSR. In Japanese speakers, the word kanashii activates a suppression cue (due to display rules) and, simultaneously, a narrow semantic frame that excludes richer sadness concepts such as setsunai and aware, leading to decreased GSR. In the absence of any sadness word, Japanese speakers are free to access a broader, more somatically engaged sadness space, producing higher GSR but that space is not a lexical void but a culturally elaborated semantic and somatic field.

The target study's contribution is to have opened a productive empirical dialogue between linguistic anthropology and psychophysiology. Its limitation is to have treated language as a simple switch (word present vs. absent) and the body as a passive recipient of linguistic influence. A full account of how language and culture shape somatic experience will require moving beyond this binary toward a model in which words, norms, and bodies mutually constitute each other in dynamic, recursive loops.

IV. Conclusion

The target study by Yamamoto and Chen (2022) represents a bold and methodologically innovative attempt to bridge linguistic anthropology, cross cultural psychology, and psychophysiology. By demonstrating that the presence versus absence of an explicit sadness word produces opposite patterns of autonomic arousal in Japanese and American speakers, the study provides provocative evidence that language penetrates somatic experience in culturally modulated ways. The observed interaction Americans showing higher GSR when "sad" is present, Japanese showing higher GSR when it is absent is statistically robust and conceptually intriguing.

However, as this review has argued, the study substantially overclaims lexical causality. The interpretation that "absence of a sadness word alters autonomic arousal" conflates at least three distinct mechanisms: (a) true lexical gaps (which do not exist in Japanese), (b) pragmatic avoidance driven by cultural display rules, and (c) the activation of alternative, semantically richer sadness concepts (e.g., setsunai, aware) in the open ended condition. Moreover, the study's methodological limitations, including unexamined translation equivalence, lack of baseline autonomic correction, uncontrolled respiration confounds, and a restricted young adult sample—undermine the specificity of its conclusions. Finally, alternative causal directions (from body to language) and competing theoretical frameworks (cultural display rules, embodied cognition) remain equally consistent with the data. The study opens an important empirical door but does not yet tell us what lies behind it.

Recommendations for Replication

To move beyond the presence/absence binary and toward a mechanistic understanding of how emotion words interact with autonomic arousal, future research should incorporate three key design innovations.

First, employ implicit measures of emotion word activation. The target study's explicit self labeling task is susceptible to demand characteristics and strategic regulation. Implicit measures such as the lexical decision task (LDT) or the emotional Stroop task can index the automatic accessibility of sadness words without requiring participants to consciously label their feelings. For example, after an emotion recall induction, participants could be presented with sadness related words (e.g., "sad," kanashii, "grief," setsunai) and neutral words; faster reaction times to sadness words indicate higher lexical accessibility. If the target study's findings reflect genuine linguistic relativity, then GSR should correlate with lexical decision latencies faster access to "sad" should predict higher GSR in Americans, while faster access to setsunai or somatic terms should predict higher GSR in Japanese. Such a design would move beyond experimental manipulation to continuous, individual difference measures.

Second, add a third language group with a structurally different sadness lexicon. German offers an informative contrast. German possesses the word Traurigkeit (sadness), which is lexically and culturally similar to English "sadness." However, German also has Weltschmerz (world pain or world weariness), a melancholic concept that encompasses sadness about the imperfection of the world—semantically overlapping with Japanese aware but etymologically and culturally distinct (Storbeck & Clore, 2008). Comparing German speakers to American and Japanese speakers could disentangle whether the observed effects are specific to Japanese cultural display rules or reflect a more general principle: cultures with lexically elaborated "complex" sadness concepts (Japanese aware, German Weltschmerz) show higher autonomic arousal when those concepts are accessible (open ended condition), whereas cultures with a

single dominant sadness concept show higher arousal when that concept is explicitly primed. A three group design would also allow statistical control for individual differences in interdependent versus independent self construal, addressing the display rules confound directly.

Third, include a non word control condition. The target study's manipulation confounds the presence of a sadness word with the presence of any word at all. A stronger design would include a condition in which participants are asked, "How [nonsense syllable] do you feel?" (e.g., "How blurp do you feel?") or a condition using an emotion word from another domain (e.g., "How angry do you feel?") to test specificity. If the observed cross cultural interaction is specific to sadness words rather than to any linguistic prompt, then GSR differences should not appear in non word or mismatched emotion control conditions. Such controls are standard in psycholinguistic research on semantic priming but were notably absent in the target study.

Beyond these design changes, replication should also incorporate (a) baseline measures of trait anxiety and depression (to control for pre existing group differences), (b) respiration monitoring (to ensure HRV validity), (c) a within subjects design (to examine how the same individual's physiology changes across conditions), and (d) a broader age range, including older adults, to test generational differences in display rule internalization.

Practical Applications: Clinical Implications for Cross Cultural Assessment of Mood Disorders

Despite its limitations, the target study's core insight, that the language used to ask about sadness alters somatic markers of distress, has direct clinical implications. In diagnostic assessment and psychotherapy, clinicians routinely ask patients questions parallel to those used in the study: "Do you feel sad?" (word present) versus "How have you been feeling lately?" (word absent). The findings suggest that, for Japanese patients, asking "Kanashii desu ka?" ("Are you sad?") may systematically underestimate subjective and physiological distress because the explicit use of the word "sad" activates cultural suppression mechanisms. Conversely, the open-ended question "How do you feel?" may reveal higher levels of distress, but it may also capture culturally specific idioms such as mune ga kurushii ("chest pain"), which Western clinicians might misinterpret as somatic symptom disorder rather than depression.

This has serious diagnostic consequences. The PHQ 9 (Patient Health Questionnaire 9), the most widely used depression screening tool, includes the item "Feeling down, depressed, or hopeless"—explicit sadness labeling. Cross cultural validation studies have shown that the PHQ 9 performs adequately in Japanese samples, but these validations typically rely on total score correlations, not on whether the specific wording of each item elicits equivalent responses (Matsumoto & Hwang, 2011). The target study raises the possibility that item level measurement non equivalence may be driven by the very presence of a sadness word. In other words, a Japanese patient who endorses "I don't feel sad" may nonetheless exhibit high autonomic arousal and clinically significant depression when asked in an open ended format.

Chentsova Dutton and Tsai (2010) demonstrated that Asian American and European American participants differ in how their self reported distress correlates with physiological measures, with Asian Americans showing lower correspondence. The target study provides a potential mechanism for this decoupling: explicit sadness labeling may trigger culturally learned suppression, disrupting the concordance between subjective report and somatic state. Clinicians working with Japanese or other East Asian patients should consider using multiple assessment modalities—including implicit measures, idiographic narrative questions, and attention to somatic idioms—rather than relying solely on direct translation of Western origin sadness items.

Furthermore, the findings caution against the routine use of emotion labeling as a therapeutic technique across cultures. Affect labeling is a core component of many evidence based psychotherapies (e.g., cognitive behavioral therapy, psychodynamic therapy), where putting feelings into words is presumed to be universally beneficial (Torre & Lieberman, 2018). For Japanese patients, however, explicit "sadness" labeling may inadvertently increase suppression or reduce the therapeutic alliance if experienced as culturally intrusive. Culturally adapted interventions might replace "How sad are you feeling?" with "Where in your body do you feel it?" or "What kind of feeling is this?", leveraging somatic metaphors that are more culturally congruent while still facilitating emotional processing.

In conclusion, the target study's provocative findings, when critically integrated with existing literature and viewed through the lens of clinical translation, point toward a future in which cross cultural emotion research moves beyond simple lexical contrasts toward dynamic, multi method, and clinically embedded models of how language, culture, and body co construct emotional life.

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