

10th Conference of the Consortium of European Research on Emotion



CERE 2025 Program

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Organisation Committee

Conference Chair: Anna Tcherkassof **Conference Co-Chair:** Martin Krippel **Local Chair:** Elora Perret-Depiaz **Website and Communication Chair:** Damien Dupré

Keynote Speakers

16 July: Steve Heine (9:45 - 10:45)

Steven J. Heine is Professor of Social and Cultural Psychology and Distinguished University Scholar at the University of British Columbia. After receiving his PhD from the University of British Columbia in 1996, he had visiting positions at Kyoto University and Tokyo University, and was on the faculty at the University of Pennsylvania before returning to British Columbia. He has authored the best-selling textbook in its field, entitled "Cultural Psychology," and has written two trade books called "Start Making Sense" (2025) and "DNA is not Destiny" (2017). Heine has received numerous international awards and is a fellow of the Royal Society of Canada.

Heine's research focuses on a few topics that converge on how people come to understand themselves and their worlds. In particular, he is most known for his work in cultural psychology where he has explored the key role that culture plays in shaping people's psychological worlds. More recently he has explored the concept of cultural fit and how people tend to have greater well-being and health when their behaviors and self-concept are more aligned with the surrounding culture. He has also conducted research exploring how people make meaning in the face of meaninglessness, and how people rely on essentialist biases when they make sense of genetic concepts.

17 July: Agnes Moors (09:30 - 10:30)

Agnes Moors is Full Professor at KU Leuven and Associate Member of the Swiss Center for Affective Sciences. She combines theoretical work informed by philosophy with empirical research. Her theoretical work focuses on the comparison of emotion theories, the conceptual analysis of automaticity, the critical analysis of dual-process models, and the development of a goal-directed model for behaviour causation. Her empirical work examines the role of goal-directed processes in emotional and (seemingly) maladaptive behaviour in daily life and psychopathology using state of the art experimental behavioural and neuroscientific methods.

18 July: José-Miguel Fernández-Dols (09:30 - 10:30)

José-Miguel Fernández-Dols is an Emeritus Professor of Psychology at the Autònoma University of Madrid. His research focuses on facial expression and everyday conceptions of emotion. In the case of facial expression he is interested in the role of context and the observational description of non-posed expressions of emotion. In the case of everyday knowledge of emotions he is interested in the concepts of emotion in different cultures, as well as their interaction with social norms, social justice, and moral behavior in general.

Conference Locations

Located in the heart of a **remarkable environment** with 3 mountain ranges (Belledonne, Chartreuse and Vercors), Université Grenoble Alpes is situated on several sites in the Grenoble metropolitan area (Grenoble Alpes Métropole). The main campus, located in the districts of Gières and Saint-Martin-d'Hères, is recognized as **one of the most beautiful in France**, with its 3,000 trees, cultural and sports facilities and unique architecture.



Credit: Université Grenoble Alpes [\[link\]](#)

All talks and keynotes will take place in the building **Pierre Mendès France**, located **near the TRAM Station "Bibliothèques Universitaires"**. This area, designed for teaching large groups, features several recently renovated auditoriums.

Exact address: [77 Rue des Universités, 38400 Saint-Martin-d'Hères, France](#)

Instructions for Presenters

Symposium and Oral Presentations

For those giving Oral Presentations, you will be afforded a **12-minute slot for your talk and 2 minutes for any audience questions**.

All presentations will be uploaded onto a computer provided by Grenoble Alpes University and will be deleted at the end of each day.

! Important

Please bring your **presentation on a USB stick**, along with a PDF version as a backup in case your original file format encounters issues.

We kindly ask you to **arrive 15 minutes before the start of your session to upload your presentation**. A volunteer assigned to your room will be there to assist you.

If you really need to, **you may use your own laptop, but make sure to bring your adapter**. Lecture halls are equipped with HDMI cables.

In all rooms in the conference, the projection systems are in the 16:9 format.

Symposia will be moderated by the symposium organizers. Individual talks sessions will be assigned a moderator. Moderators are indicated in the [CERE2025 program](#). For oral presentations, please **make sure to contact your session moderator** before your scheduled session. You may be asked to send your slides in advance.

Posters and Poster Group Presentation

You are strongly encouraged to **set up posters in the morning before the first conference session**. You are welcome to leave your poster up till the end of the day. The following are the guidelines for poster presentations:

- Poster size is limited to 84.1 x 118.9 cm (**A0 format maximum**). **Only portrait layouts are supported**. We will provide posterboards and stationery for attaching your poster.
- Your poster must contain the abstract title and the name(s) of the poster author(s).
- QR codes may be included on posters and handouts so long as the code does not lead to a website or materials promoting or marketing a company or product
- You should bear in mind that your illustrations will be viewed from distances of 3 feet or more. All lettering should be sized accordingly.

Poster Printing Services

If you plan to print your poster after arriving in Grenoble, here's how to proceed.

1. **Send your poster in PDF format** and at the correct size to the following email address:
grenoble.campus@corep.fr

Be sure to specify the size **A0 portrait** and the type of paper you want.

You can choose between two paper types:

- Paper 180g matte ("papier 180g mat" in French)
 - Paper 200g glossy ("papier 200g brillant" in French)
 - Eco fabric ("Tissu éco" in French) more affordable, with a slightly textured ("grainy") surface
 - Foldable fabric ("Tissu pliable in French) can be folded instead of rolled; also has a slightly textured surface
2. If your file is correctly formatted and in PDF, they can print it on the same day you place the order.

Please note that the print shop is about a **15-minute walk** from the conference venue. Between July 15th and July 18th, it will be open from 9.30am to 5.30pm.

Corep

- About 15 minutes' walk from the conference venue
- Website: <https://www.corep.fr/fr/agence/corep-saint-martin-dheres/>
- Phone: +33 (0)4 76 51 23 05
- Email: grenoble.campus@corep.fr
- Address: 2, rue du Tour de l'Eau Z.I. Champ Roman 38400 St-Martin-d-Heres
- Opening hours: 9.30am-5.30pm Monday to Friday, closed Saturdays and Sundays as well as July 14th (Bastille Day)

Poster Group Presentation

For this edition of CERE, we are introducing a new format for poster presentations, which we are calling the **"Poster Group Presentations"**. Posters will be grouped thematically and displayed side by side. At the start of each Poster Session, **each presenter in the group will have 5 minutes to present their work in front of their poster, one after the other**. Presenters within each group are free to decide amongst themselves the order in which they will speak. Once the short presentations are complete, the usual informal discussions can begin.

Participation in this new format is encouraged but **entirely optional**. If you would prefer not to take part, feel free to let the other presenters of your group know it.

Our aim with this new feature is to give every poster presenter the full attention of the CERE attendees and the recognition their work deserves. We hope you will support and enjoy this addition to the program.

Main Conference Overview

16 July

8:30-09:30	Registration & poster set up (and coffee ;-)
09:30-9:45	Opening remarks
9:45-10:45	Amphi 1: Keynote Speaker Steven Heine
10:45-11:15	Coffee break
11:15-12:30	Parallel Session
12:30-13:30	Lunch
13:30-14:45	Parallel Session
14:50-15:50	Poster session (28 posters)
15:50-16:20	Coffee break
16:20-17:35	Parallel Session

17 July

09:00-09:30	Registration & poster set up
09:30-10:30	Amphi 1: Keynote Speaker Agnes Moors
10:30-11:00	Coffee break
11:00-12:15	Parallel Session
12:15-13:15	Lunch
13:15-14:30	Parallel Session
14:35-15:35	Poster session (23 posters)
15:35-16:05	Coffee break
16:05-17:20	Parallel Session
17:30-18:30	CERE's Business Meeting in room: amphi 6
Evening	CERE2025 Gala Dinner

18 July

09:00-09:30	Registration
09:30-10:30	Amphi 1: Keynote Speaker José-Miguel Fernández-Dols
10:30-11:00	Coffee break
11:00-12:15	Parallel Session
12:15-13:15	Lunch
13:15-14:30	Parallel Session
14:35-15:35	Poster session (23 posters)
15:35-16:05	Coffee break
16:05-17:20	Parallel Session
17:30-18:00	Farewells

Main Conference Detailed

16 July

8:30-09:30 Registration & poster set up (and coffee ;-)

09:30-9:45 Opening remarks

9:45-10:45 Amphi 1: Keynote Speaker Steven Heine

10:45-11:15 Coffee break

11:15-12:30 Parallel Session

Time	Communications
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Emotional and Sensory Modality Shift	
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11:15	Pan Zhihe - Emotion Communication in Speech Prosody: The Role of Culture and Language Tone
11:30	Fang Xia - Bimodal Emotion Decoding: When Faces and Voices Diverge
11:45	Folyi Timea - Fine-grained affective experiences can occur spontaneously and involuntarily: Nine different types of affective feelings indirectly evoked by music
12:00	Bell Meir Argaman - Social Context Shapes Facial Synchronization - A Virtual Reality Study
12:15	Discussion

Facial Expressions and Culture	
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11:15	Perret-Dépiaz Elora - Facial displays interpretation among Zapotecs and Spaniards: A cross-cultural study
11:30	Cong Yong-Qi - A pre-registered meta-analysis on cross-cultural emotion recognition from facial expressions: No evidence of an ingroup advantage
11:45	Gurbuz Emre - Evaluative Responses to Emotional Expression and Group Membership in the Evaluative Priming Task
12:00	Mazhar Anushay - Emotion Knowledge Trajectories in Pakistani Preschoolers: A Multilevel Longitudinal Study
12:15	Discussion

Time	Communications
What Texts Reveal About Emotion	
11:15	Fernández Viña Alicia - Rivers of Ambition and Shadows of Guilt. Lady Macbeth's Descent through Aristotelian Affects
11:30	Eyal Tal - Investigating the Link Between Emotions and Construal Level Using Language Models
11:45	Noblet Jonas - From emotion to opinion: Extrapolating appraisal dimensions to the characterization of textual opinions
12:00	Wuttke Yannick - Emotional Spillover on Social Media: The Impact of Incidental Emotions on Advertising Effectiveness
12:15	Discussion
Symposium A Self-determination Theory Perspective on Emotion Regulation -	
11:15	Van der Kaap-Deeder Jolene - Taking Ownership of One's Positive Emotions: The Relation From Emotion Crafting To Mental Health Across Four Weeks
11:30	Hernandez Hernandez Maria Elena - Positive and Proactive Emotion Regulation and Need Fulfillment: The Daily Links Between Emotion Crafting and Psychological Needs
11:45	Taşkesen Nureda - The Role of Parental Autonomy Support and Warmth in Psychological Well-Being: The Mediating Role of Emotion Crafting
12:00	Rashid Asma - The Moderating Role of Childhood Trauma in Daily Emotion Regulation and Basic Needs: An Experience Sampling Method Study On Well-Being and Ill-Being
12:15	Discussion
Symposium Navigating eco-emotions: an overview of recent research on their impact on pro-environmental behaviors -	
11:15	Lackner Zoé - Eco-emotions in action: Two studies that highlight the theoretical issues involved in understanding the link between eco-emotions and pro-environmental behaviors
11:30	Bellemin Ronan - Investigating the relationship between positive eco-emotions and pro-environmental responses
11:45	Davreux Zoé - How are eco-emotions related to different pro-environmental behaviors among university graduates? A longitudinal study

Time	Communications
12:00	Sapin Arnaud - What drives pro-environmental actions? Insights into eco-emotions and political perceptions among young people
12:15	Discussant : Aurélien Graton

12:30-13:30 Lunch

13:30-14:45 Parallel Session

Time	Communications
Emotional Postures and Embodiment	
13:30	Galvagnon Coralie - Pigs' tail posture during emotions of success and failure.
13:45	Armony Jorge L. Postural feedback effects on mood and risk-taking behavior in ecologically-valid settings
14:00	Kastendieck Till - Emotional Mimicry in Virtual Reality: Evidence Gathered with Head-Mounted Displays Featuring Integrated Electromyography Technology
14:15	Discussion
14:30	Discussion
Anxiety and Emotional Trauma	
13:30	Prikhidko Alena - De-Villainizing Envy: Emotion Regulation Counseling in Addressing Systemic Inequities, Mental Health, and Radicalization Among Immigrant Populations
13:45	Hevron Hadas - Radical Acceptance Training Improves Coping During War: Evidence from Two Randomized Controlled Trials.
14:00	Giersiepen Maren - The weight of failure: Depressive tendency intensifies the loss of control following negative feedback
14:15	Discussion
14:30	Discussion
Symposium Emotional Integration versus Emotional Avoidance: A Self-Determination Theory Approach to Adaptive Emotion Regulation -	
13:30	Legault Lisa - The Importance of Emotional Openness in Social Action

Time	Communications
13:45	Roth Guy - Empathize with The Enemy: Emotion Regulation, Empathy, and Support for Pacifying Policies in Intractable Conflicts
14:00	Benita Moti - The Impact of Goal Self-Concordance on Emotion Regulation during Academic Goal Pursuit: A Multilevel Latent Profile Analysis Approach
14:15	Philippe Frederick L. - Emotion Regulation in Adults' Memories of Child Maltreatment: Implications for Mental Health
14:30	Discussant : Netta Weinstein
Data Workshop - Identifying Correct or Incorrect Emotion Recognition from Facial Expression Time	
11.15	Data Workshop - Damien Dupré - Identifying Correct or Incorrect Emotion Recognition from Facial Expression Time

14:50-15:50 Poster session (28 posters)

Title	Authors
Emotion Regulation 1 - Chair: Aslihan Ataman	
The Role of Integrative Emotion Regulation on Psychological Well-being: A Self-Determination Theory Perspective	Ataman Aslihan
Exploring Interpersonal Emotion Regulation Strategies in Parents of Children with Neurodevelopmental Conditions: A Qualitative Analysis	Ahmad Sam, Cai Ru Ying, Prosetzky Ingolf, Uljarevic Mirko, Zurbriggen Carmen, Gross James, Samson Andrea
Emotion Regulation of Envy: The Role of Suppression and Cognitive Reappraisal	Prikhidko Alena, Kushnerenko Dmitry, Qiu Yuxi
Emotions and social relations 1 - Chair: Manuela Mura	
Prosodic Alignment and Individual's Speech Patterns as Predictors of Social Interaction Quality	Aviv Eldad, Ravreby Inbal, Yeshurun Yaara
The Effect of Guilt and Shame on Construal Level and Psychological Distance	Marié Vincent, Alexopoulos Théodore

Title	Authors
Preferred and inferred empathic accuracy strategies between romantic partners	Goldberg Juli, Eyal Tal
Exploration of students' use and development of emotion skills in biomedical science lab learning	Mura Manuela
Subjective valuation from individual decision-making to joint action	Navare Uma, Belkaid Marwen
Emotions in Daily Life: Interpersonal Perspectives Across Contexts and Cultures - Chair: Davide Pirrone	
Emotions in Intimate Relationships: A Cross-Cultural Perspective on Couples' Emotion Profiles and Partners' Well-being	Pirrone Davide, Schouten Anna, Ceulemans Eva, Mesquita Batja, & Verhofstadt Lesley
Exploring the heterogeneity in depression through an interpersonal lens: The role of value attached to agency and communion	Kalkan-Cengiz Rana B., Verhees Martine, Sels Laura, Kuppens Peter
Feasibility of a novel open question design to assess dyadic events in daily life: a daily diary study	Carlier Chiara, Kuppens Peter, Ceulemans Eva
Facial Expression Recognition - Chair: Liron Amihai	
Investigating the Relationship between Social Anxiety and Face Perception	Liu Shengtong, Elliott Rebecca, Lander Karen
Exploring the Role of Emotion Intensity and Background on Face Emotion Recognition	Peng Yuanyi, Lander Karen, Kafkas Alex
Facial Mimicry Predicts Emotion Recognition Capacity	Amihai Liron, Maer Shachar, Yeshurun Yaara
Mental health/Mindfulness - Chair: Madeline Murphy	
Mindfulness and Its Correlation with Youth Mental Health	Wasylkowska Maria, Kobylińska Dorota, Holas Paweł, Mituniewicz Julian, Robak Natalia
The Language of Emotion and Identity in Emergencies	Murphy Madeline

Title	Authors
Processing negative stimuli and beyond: Emotional dynamics in at-risk individuals with independent or co-occurring anxiety and depression symptoms	Rendes Réka, Lang Diana Agnes, Varkonyi Gergo, Deak Anita
Motivation/values and Emotion - Chair: Samuel Silva	
Attentional Bias to Positive and Negative Stimuli: The Role of Intrinsic and Motivational Relevance	Boğa Merve, Koyuncu Mehmet
How do Achievement Goals Relate to Daily Personal Goal Pursuit? Emotion Regulation's Mediating Role	Katz-Vago Inbar, Benita Moti
Is male sexual arousal an emotional state indexed by pre-attentional tendencies toward erotic pictures?	Silva Samuel, Rosa Pedro J., Joana Carvalho
Human Values Elicit Negative Feelings And Therefore Ambivalence.	Maslamani Aysheh, Kanfo-Noam Ariel, Maio Greg, Mayo Ruth
Cultural Differences in Beliefs about Emotions, Everyday Emotion Regulation and Affect Changes between UK and China	Ge Yiran
Evidence on female sexual arousal as an emotional state unconsciously triggered by sexual stimuli	Joana Carvalho, Rosa Pedro, Silva Samuel
Neuronal correlates of emotions - Chair: Beatriz Bermúdez Margaretto	
	Bermúdez Margaretto Beatriz, Pérez García Elisa, Trujillo Trujillo Cristian Camilo, Fernández Ángel, Sánchez Manzano María Jesús
Behavioural and neurophysiological correlates of enhanced L2 emotional vocabulary through targeted instruction	Salagnon Mathilde, Delplanque Sylvain, Vuilleumier Patrik, Sander David
Odor-evoked affective responses: integrating fMRI, behavioral, olfactory, and psychometric data	Shi Chunyan, Wirsich Jonathan, Chen Zile, Vuilleumier Patrik
How does thinking more positively change our brain?	Zvi Yohay, Kerem Nitai, Yeshurun Yaara
Religious-Dependent Neural Synchronization	

Title	Authors
Emotional Vocal Instructions: Task Performance, Neural Processing, and Recognition Accuracy in Different Cultures	Zdanovica Anita, Trinite Baiba, Skilters Jurgis, Nakatani Chie

15:50-16:20 Coffee break

16:20-17:35 Parallel Session

Time	Communications
Hate, Stress, Creepiness and Other Sentiments	
16:20	Martinez Cristhian - The Hated One: Human and Psychological Attributions toward Hate Targets
16:35	Cohen-Charash Yochi - (Re)Discovering Sentiments: A New Lens on Workplace Affect
16:50	Giner-Sorolla Roger - Feelings of Creepiness Encourage, Rather Than Discourage, Identifying and Acting on Sexual Harassment
17:05	Aguilera Aitana - The weight of expectations: Gender role stress and fear of negative evaluation shaping women's well-being
17:20	Discussion
Moral Models & Social Identity	
16:20	Russell Sophie - The Dynamic Interplay of Emotions and Perspectives in Apologies
16:35	Basiyd Fellahi Haouria - Driving Moral Disengagement and Moral Emotions: A Qualitative Exploration
16:50	Baele Céline - Exploring Moral Distress from a Componential Emotion Perspective: Evidence for a Multidimensional Construct
17:05	Panasiti Maria Serena - Reducing gastric rhythm via tVNS mitigates the effects of disgust inductions on moral emotions and behavior
17:20	Discussion
Everyday Emotion Regulation	
16:20	O'Dea Muireann - Self-Transcendent Emotions and Boredom in Daily Life

Time	Communications
16:35	Lettieri Giada - Valence similarities between intermediate and final emotional states determine the plausibility of complex emotional trajectories
16:50	Krajuškina Maria - Comprehensive Assessment of Appraisal Shifts in Reappraisal of Positive and Negative Vignettes
17:05	Matthijs Marie - Investigating the validity of the Situational Test of Emotion Regulation Ability in a community sample
17:20	Discussion
Symposium Affective processes in information-seeking -	
16:20	Vivanco Carlevari Anastassia - Images and stories of suffering: Why do people choose to engage with emotionally evocative content?
16:35	Stussi Yoann - Affective relevance and valence modulate information value learning
16:50	Leone Giovanni - The curious brain: Dissecting the brain mechanisms of curiosity and reward
17:05	O'Donoghue Ellen M. - Disentangling the influences of curiosity and active exploration on cognitive map formation
17:20	Scholl Jacqueline - Foraging under threat
Symposium Research Methods and Materials for Studying Emotions in the Face -	
16:20	Gebele Jens - Do AI and Humans Look at Emotions the Same Way? A Study Using Explainable AI
16:35	Küster Dennis - EMG-based Action Unit Recognition and Animation
16:50	Van Apeldoorn Nick - From Altered Photographs to Virtual Humans: Exploring Emotional Perception in Experimental Research
17:05	Wróbel Monika - The Dynamic Posed Emotional Crying Behavior Database (DPECBD): A Comprehensive Resource to Study the Multifaceted Nature of Emotional Crying
17:20	Zinkernagel Axel - Not just points in a cloud: A marker-based comparison of biases in dynamic landmark detection performance across four automatic emotion recognition systems

17 July

09:00-09:30 Registration & poster set up

09:30-10:30 Amphi 1: Keynote Speaker Agnes Moors

10:30-11:00 Coffee break

11:00-12:15 Parallel Session

Time	Communications
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Emotion Across Cultures

- | | |
|-------|--|
| 11:00 | Kamiloglu Roza - When to Laugh, When to Cry: Display Rules of Nonverbal Vocalisations Across Four Cultures |
| 11:15 | Guess C. Dominik - Positive Emotions as Foundation of Mindfulness and Creativity Across Cultures |
| 11:30 | Cochez Anouck - How does explicit acculturation affect emotional acculturation over time? |
| 11:45 | Discussion |
| 12:00 | Discussion |

Life Satisfaction and Well-Being

- | | |
|-------|---|
| 11:00 | Steffgen Sarah Teresa - Emotion regulation styles and life satisfaction in families: A triadic actor-partner interdependence model |
| 11:15 | Mignolli Giada - Emotion Regulation Flexibility Questionnaire (ERFQ): Italian Validation, Invariance, and Additional Insights into Related Constructs |
| 11:30 | Liu Jinrui - Hedonism vs. Emotional Need Satisfaction: Folk Values and Their Relationship to Well-being |
| 11:45 | Yeung June - Is it okay to feel bad? A cross-national investigation of actual-ought discrepancies in negative emotions and their impact on well-being |
| 12:00 | Discussion |

Symposium New Insights into the Interplay between Emotion and Motivation: Responding, Resisting, and Regulating Emotions and Affect -

Time	Communications
11:00	Falk Johanna R. - Affective Influences, Task Choice, and Effort: Insights from Cardiovascular Responses
11:15	Bernecker Katharina- High Self-Control Individuals Prefer Meaning over Pleasure
11:30	Hu Danfei - The (In)efficacy of Effort in Emotion Regulation in Depression
11:45	Vogt Julia - "It could be so much worse?!": The Benefits of Perspective Broadening Depend on Emotion Regulation Abilities
12:00	Discussion

Symposium A Developmental Perspective on Emotion: Emotional Expression from Infancy to Adolescence -

11:00	Suata Zeynep M. - Developmental changes in infant affect dynamics during an emotion-eliciting task
11:15	Folz Julia - Affect dynamics during social interactions in early childhood: The role of maternal stress
11:30	Von Wulffen Clemens - Visual production of emotions: A drawing and rating study
11:45	Nikolic Milica - Cross-cultural emotions reconsidered: the spontaneous production of emotions across age in Japan and the Netherlands
12:00	Aktar Evin - Parent-to-child transmission of stranger anxiety via verbal information

12:15-13:15 Lunch

13:15-14:30 Parallel Session

Time	Communications
Reading Faces: Individual and Social Skills	
13:15	Lander Karen - Individual differences in face emotion recognition ability: Exploring socio-emotional functioning
13:30	Gupta Siddhima - Activating the social processing mode during visual search: the additional singleton paradigm
13:45	Malinowski Paweł - The Categorization of Reward, Affiliative, and Dominance Smiles: The Role of Smile Conceptualization and Dynamics

Time	Communications
14:00	Mas Marine - The Role of Executive Function and Emotional Salience in Alexithymia: Insights from Inhibitory Performance
14:15	Discussion
Well-Being Across Cultures & Contexts	
13:15	Güven İlke Nur - AI as a Social Agent: The Influence of ChatGPT Interactions on Psychological Well-Being
13:30	Yurdum Lidya - Emotional responses to music across cultures and individuals
13:45	Allison Bronagh - Gossip face: A response to social context or inner felt states?
14:00	Discussion
14:15	Discussion
Cognitive and Emotional Regulation Mechanisms	
13:15	MacCann Carolyn - Associations Between Affect-Worsening Extrinsic Emotion Regulation Strategies and Relationship Quality Across a Two Year Period
13:30	Cheah Winnie - The Role Of Fear And Worry In Predicting Climate Change Mitigation Behaviour Among Flood Victims
13:45	Wyczesany Mirosław - Out of Sight, Still in Mind: The Role of Cognitive Control in Implicit Emotion Regulation
14:00	Sanchez Janice - Inter- and Intrapersonal Emotion Regulation of Envy and Sadness at Work
14:15	Discussion
Symposium The Science of Awe: Nuances, Correlates, and Transformative Potential	
-	
13:15	Tunc Ece - Awe Enhances the Sense of Immeasurability
13:30	Jin Bihui- Basic Human Values and the Transformative Effects of Awe
13:45	Zhao Chenxiao - Exploring the Dual Nature of Awe: Effects of Positive- and Threatening Awe on Self-Transcendent Experiences
14:00	Patterson Ruairi - Associations between Tendency to Experience Awe and Narcissistic Rivalry
14:15	Gocłowska Gosia - How do People Perceive and React to Awe-Prone Individuals?

Title	Authors
Emotion Regulation 2 - Chair: Emma Rolland-Carlichi	
Exploring Emotion Regulation through the Integration of ER Flexibility and ER Skills Models: A Network perspective	Rolland-Carlichi Emma, Baeyens Céline, Bortolon Catherine
Is it easier to reduce your sadness or disgust? On the effectiveness of emotion regulation as an effect of strategy used, emotion and HRV	Kobylińska Dorota, Mituniewicz Julian
Bridging Cognitive Control and Emotion Regulation: New Findings from Meta-Analyses	Schulze Katrin, Mueller Ilka, Holt Daniel V., Putz Sam, Barnow Sven, Pruessner Luise
FEEL the Difference: Concurrent and Prospective Validity of Emotion-Specific Regulation Strategies	Van Bockstaele Bram, Soenens Bart, Prinzie Peter
Emotion recognition in Mild Cognitive Impairment (MCI): The role of face processing and emotional intelligence.	Mahadevan Rachana, Giesers Naomi, Liman Thomas, Witt Karsten, Hildebrandt Andrea, Roheger Mandy
Emotion, Psychophysiology, Multimodality - Chair: Alessandra N. C. Yu	
Comparing Theoretical Models of Co-Occurring Emotions Using Multi-Modal Time Series Data	Küppers Sebastian, Lange Jens
The Role of Awareness in Unconscious Emotional Processing: Evidence from CFS and SCR Responses	Gonul Turkmen Selen, Booth Robert
Can Optical Heart Rate Measurement Track Emotional Processes in Children? Evaluating the Link Between Photoplethysmography and Emotional Processes in Preschool Children	Lorusso Sonja, Nischak Pablo, Diebold Tatiana, Burkhardt Bossi Carine, Harel Ori, Pruessner Jens, Perren Sonja
I React to Bodies but not Faces, Replication and Extension of Aviezer et al., 2012	Pillaud Nicolas, Chassaing-Monjou Clément, Cottin Adèle

Title	Authors
Mood modulations of affective word processing: a predictive perspective of encephalographic data	Kopaeva Ekaterina, Blomberg Johan, Roll Mikael
The Human Affectome	Yu Alessandra N. C.
HCI / AI and Emotion - Chair: Eva Naumann	
Emerging Trends in Anxiety Sensitive Artificial Intelligence	Vanhée Loïs
Too Real to Feel? Examining Avatar Realism in Digital Emotion Regulation Training	Naumann Eva
A Gamepad-based Interface for Continuous Real-Time Emotion Tracing	Pathak Divya, Srinivasan Narayanan
Transformative Learning and Artificial Intelligence: Emotions as Catalysts for Learning Processes	Heidemann Marc-André
In sync or not: What are the correlates of physiological synchronicity? - Chair: Hedwig Eisenbarth	
To synchronise or not to synchronise? Investigating physiological synchrony in emotional performances	Goldsack Roydon, Hyland Nicola & Eisenbarth Hedwig
Task switching during nonverbal interactions promotes cardiac synchrony, while social anxiety reduces it. Considering the role of reciprocal attention in physiological synchrony	Boukarras Sarah, Placidi Valerio, Rossano Federico, Era Vanessa, Aglioti Salvatore Maria & Candidi Matteo
Partner stress decreases cardiac synchronization in romantic couples	Denk Bernadette F., Meier Maria, Ocklenburg Sebastian, Packheiser Julian, Wienhold Stella, Volkmer Nina, Gaertner Raphaela J., Klink Elea S.C., Dimitroff Stephanie J., Benz Annika B.E. & Pruessner Jens C.
Harmful to Relationships, Helpful in Adversity: The Nuanced Role of Psychopathic Traits in Partner Support, Stress and Physiological Synchronisation	Hissey Aaron, Hammond Matt & Eisenbarth Hedwig
Politics and Emotion - Chair: Katherine Aumer	
Perceived Threat as a Driver of Hate: Lessons from the 2024 U.S. Election in a Global Context	Aumer Katherine

Title	Authors
The Hidden Cost of Psychological Threat: How Economic Stress Fuels Emotional Suppression and Undermines Well-being	Valor Segura Inmaculada, Alonso Ferres María, Guzmán María Teresa
Climate change and hope ratings modulate valence and arousal ratings of emotional images	Plonski Paul, Durgin Frank
The Role of Emotion in Updating Expectations for the Distant Future	Orphal Lara, Pinquart Martin

15:35-16:05 Coffee break

16:05-17:20 Parallel Session

Time	Communications
Social and emotional dynamics in human interactions	
16:05	Rychlowska Magdalena - Measuring group- and dyadic-oriented friendship styles
16:20	Zitouni Abir - Bridging the Gap: SEL Implementation in U.S. and European Higher Education
16:35	Koopmann-Holm Birgit - Wanting to Avoid Feeling Negative: A Barrier to Becoming Anti-Racist
16:50	Segbert Lisa-Marie - Grossly Misjudged: Are Stereotypes a Consequence of Distinctiveness Within the Behavioral Immune System?
17:05	Discussion
Sensing Emotions	
16:05	Adamczyk Anastazja - Does emotion modality matter? Matching colours to faces, voices, and words representing the same 17 emotions.
16:20	Martynova Ekaterina - Positivity and Negativity Biases in Emotional Word Processing
16:35	Jeanningros Alice - Quantifying altered emotion detection of joy, sadness and disgust on overweight faces: preliminary results
16:50	Durfee Alexandra - Comparing past and present affective aprosodia taxonomies to improve communication rehabilitation after right hemisphere stroke

Time	Communications
17:05	Discussion
Symposium Rethinking the Relationship Between Emotional Mimicry and Emotional Contagion: Revisiting Theoretical Models and Empirical Evidence -	
16:05	Wołoszyn Kinga - Smiling more to social sounds? Sighted and blind individuals show greater zygomaticus activity to positively valenced human vocalization than to comparably valenced instrumental sounds
16:20	Olszanowski Michal - How do you feel me when you don't see me? The role of visual contact in emotional mimicry and contagion during online simulated interactions
16:35	Kafetsios Konstantinos - Testing the mimicry – emotion contagion relationship: Findings from a contextualized emotion perception assessment
16:50	Lampert Oliver - Two sided emotions: How ambiguous faces and social context shape emotional mimicry and contagion
17:05	Mauersberger Heidi - When smiles don't fit: How knowledge about intent shapes emotional contagion and emotional mimicry
Symposium We still need to know more about how emotions and social context interact in driving facial activity -	
16:05	Fernández-Dols José-Miguel - Are facial expressions context? Putting the baby in the water
16:20	Kappas Arvid - Let's get to down to business. Putting theories on facial behavior into motion
16:35	Hess Ursula - The impact on social norms and expectations on emotional mimicry
16:50	Nelson Nicole - Expressive behaviour varies based on who you're with, and how close you feel to them
17:05	Heesen Raphaela - A cross-cultural investigation of the impact of social context on human emotional face and hand movements in Uganda and the UK
Symposium Intrapersonal and Interpersonal Emotion Regulation: Mechanisms, Cultural Perspectives, and Practical Applications -	
16:05	Walker Sarah A. - Situational Influences on Interpersonal Emotion Regulation Strategies Among Romantic Partners
16:20	Polias Shayne G. - Interpersonal Emotion Regulation Across Cultures: Exploring Its Impact on Well-Being and Social Dynamics

Time	Communications
16:35	Chen Yuhui - Daily-Life Benefits of Interpersonal Affect Improvement: An Ecological Momentary Assessment Study of Depression and Healthy Controls
16:50	Tornquist Michelle - Assessing the impact of a four-week cognitive reappraisal and integrative emotion regulation intervention on goal attainment
17:05	López-Pérez Belén - Interpersonal Emotion Regulation as an Intervention: Can Making Others Feel Better Improve Our Own Well-Being?

17:30-18:30 CERE's Business Meeting in room: amphi 6

19:00 Gala Dinner - Stades des Alpes We are pleased to invite you to the Gala Dinner, held at the prestigious **Stade des Alpes**. This modern venue, set against the **stunning backdrop of the Alps**, offers a stylish and spacious setting for an evening of fine dining and celebration. Join us for a night of culinary excellence and networking at the remarkable Stade des Alpes!

To get there, go to the "Hôtel de Ville" tram station, which is served by Tram Line C and bus lines C1 and C4. From the station, you will easily spot the Stade des Alpes, head in its direction.

You should enter through Hall Nord, located in the North Stand between staircases D1 and D2. Volunteers will be present on site to guide you.

18 July

09:00-09:30 Registration

09:30-10:30 Amphi 1: Keynote Speaker José-Miguel Fernández-Dols

10:30-11:00 Coffee break

11:00-12:15 Parallel Session

Time	Communications
What New Technologies Have To Offer the Science of Emotions	
11:00	Lange Jens - Investigating the social functions of emotions with agent-based modeling: The case of envy
11:15	Hollis Anna - AI and Autism: Assessing the Accessibility and Bias in Digital Companions
11:30	Sağlam Büşra - Exploring Digital Emotion Culture: A Walkthrough of Emotional Affordances on Social Media Platforms
11:45	Kaiser Jakob - Emotional Side of Innovation: What Shapes Our Hopes and Fears About New Technologies?
12:00	Discussion
Exploring emotional dynamics	
11:00	Tonini Fernando - Valence, Arousal, and Dominance in Obese and Post-Treatment Groups Exposed to Food Stimuli
11:15	Baran Hasan Deniz - Feelings of Distant Past: Emotionally Saturated Autobiographical Memories of Shame and Pride
11:30	Basu Sweta - Reliability of measuring metacognition of emotions
11:45	Besson Théo - Moderation of Evaluative Conditioning by Emotional Processing Indicators
12:00	Discussion
Symposium Make a move: What body motion can tell us about emotion – or not -	
11:00	Keck Johannes - The role of the Action Observation Network in perceiving affective body movements

Time	Communications
11:15	Crowley-de Thierry Liam - Differential Effect of Form and Motion Cues on the Perception of Emotion from Gait
11:30	Hyland Nicola - Making sense of what we can't see: performing emotion from a Māori lens
11:45	Eisenbarth Hedwig - Moving closer: How physical distance varies with feelings of closeness, facial mimicry and psychopathic personality
12:00	Discussion

12:15-13:15 Lunch

13:15-14:30 Parallel Session

Time	Communications
(Re)Appraisal Dynamics and Strategies	
13:15	Mailliez Mélody - Appraisal of certainty's effect on information processing: Attempted replications of Tiedens and Linton (2011) findings.
13:30	Uusberg Andero - Don't miss the forest or the trees: A random forest exploration of appraisal shifts in reappraisal
13:45	Uusberg Helen - Appraisal Variability: A Window into the Workings of Reappraisal
14:00	Gullotta Mathew- Good liars: Emotional intelligence in the ability to lie
14:15	Discussion
Embodiment and Emotional Expression	
13:15	Amihai Liron - Facial expressions' activation and synchronization role in enjoyment and preferences during social interactions
13:30	Wainio-Theberge Soren - Physical sources of emotional somatosensation measured by the bodily maps of emotion paradigm
13:45	Jain Riya - Gesture-restriction: Embodied emotion view
14:00	Fontaine Johnny - Beyond bodily arousal
14:15	Discussion
Symposium Innovative methods to study emotion dynamics in daily life -	

Time	Communications
13:15	Schreuder Marieke J. - Bouncing back from emotional ups and downs: Insights in emotional recovery using survival analyses of burst ESM data
13:30	Jacobsen Peer Ole - A Meaningful Measure for Affective Inertia in Continuous Affect Ratings
13:45	Versyp Otto - A meta-study of perceived versus actual partner behaviors, thoughts, and emotions in relation to mood
14:00	Discussion
14:15	Discussion
Symposium: Emotion Regulation in the Lab and in Everyday Life -	
13:15	Daches Shimrit - Successful Mood Repair in the Laboratory Predicts Successful Mood Repair in Daily Life
13:30	Pruessner Luise - Emotion Regulation Flexibility: From the Laboratory to Everyday Life
13:45	Tamm Gerly - Cognitive Foundations of Rumination in Everyday Life
14:00	Cohen Noga - Training to Provide Emotional Support to Others as a Way to Enhance Resilience
14:15	Discussion

14:35-15:35 Poster session (23 posters)

Title	Authors
Dimensions of Emotions/Arousal and Valence - Chair: Francisca Horn	
Dimensional and Categorical Emotional Ratings of Russian Nouns: The Database ENRuN-2	Sysoeva Tatiana, Lyusin Dmitry
Four-dimensional neural space for moral emotions	Chen Jinglu, Santavirta Severi, Putkinen Vesa, Boggio Paulo Sérgio, Nummenmaa Lauri

Title	Authors
Comparing your "happy" to my "happy": How to assess the affective space of an individuum	Horn Francisca, Kreuzpointner Ludwig, Wüst Stefan, Schwarzbach Jens V., Kudielka Brigitte M.
Exploring Emotional Granularity through Freely Generated Mental and Bodily Labels: A Network Analytic Approach	Telazzi Ilaria, Biassoni Federica, Ninivaggi Elisa, Viaggi Eleonora, Balzarotti Stefania
The Role of Categorization in Emotion Differentiation	Suchkpva Ekaterina, Lyusin Dmitry
The Dimensionality of Positive Valence	Brandolini Gabriel, Carter Olivia, Koval Peter
A scoping review on positive emotions in autism	Moreno Laura, Manfredi Mirella, Di Poi Giona, Gruber June, Mcpartland James C., Samson Andrea
Emotion Regulation 3 - Chair: Elena Constantinou	
Comparing the effectiveness of putatively adaptive and maladaptive emotion regulation strategies: An experience sampling study	Rasskazova Mariia, Lyusin Dmitry
Validation of Affect Labeling as an implicit emotion regulation task in a Greek-speaking sample	Constantinou Elena, Koursarou Sofia
Neuroticism and the neural basis of implicit cognitive reappraisal: an fMRI study	Várkonyi Gergő, Rendes Réka, Deák Anita
Emotion Regulation Flexibility Through the Lens of Resting-State Functional Connectivity	Ohad Tal, Madar Asaf, Tavor Ido, Sheppes Gal, Yeshurun Yaara
Dissociative reactions - on the transient inability to feel emotions	Daniels Judith
Emotions and Social Relations 2 - Chair: Teerawat Monnor	

Title	Authors
Attachment dimensions predict how and why people regulate their partner's emotions: A daily diary dyadic study	Maccann Carolyn, Wu Bernice
From Appraisals to Action: The Influence of Compassion and Distress on Prosocial Behavior	Garrido-Macías Marta, Valor Segura Inmaculada, María Teresa Guzmán
Investigating the interplay of self- and other-oriented benefits in motivational and experiential component of prosocial behavior	Monnor Teerawat, Preuschoff Kerstin, Ugazio Giuseppe
DiffuseFace: a database of AI-generated face portraits to enrich diversity in emotion research.	Firmani Alessia
Emotions and educational psychology - Chair: Peter Musaeus	
Moral Emotions vs. Bildung: Navigating Professional Formation in Academic Teaching and Learning	Musaeus Peter
CambiaColore: a movement-based technology for socio-emotional learning in the classroom	Ceccaldi Eleonora
Prosodic Emotion Recognition is Associated with Musical Abilities in Children	Fasano Maria Celeste, Nuti Gianni, Monaci Mariagrazia, Filippa Manuela
Specific Emotions - Chair: Lisa Stempfner	
Boredom and Arousal: A Multilevel Meta-Analysis	Stempfner Lisa, Stoll Sarah E. M., Fries Jonathan, Pekrun Reinhard, Goetz Thomas
Do we exhibit differential immune responses to different types of disgust?	Mungur Ramandeep, Harris Lasana, Purcell Daniel, Ogbe Orezi
How Honour Amplifies the Perceived Threat of Jealousy, and Controlling Behaviour	Shaban Azad Hadi, Giner-Sorolla Roger, Pina Afroditi, Grigoropoulos Iraklis
Musical Emotion Transfer in Expert Listeners	Varga Peter, Parkinson Brian

15:35-16:05 Coffee break

16:05-17:20 Parallel Session

Time	Communications
Interdisciplinary approaches to affective dynamics	
16:05	Smortchkova Joulia - A challenge to perceptualist theories of emotion mindreading in philosophy
16:20	Rogez Laurie - From Emotion to Expression: Behavioral Patterns and State-of-the-Art Consistency
16:35	Domenici Veronica - Changes in heart rate to aesthetic chills predict emotional complexity
16:50	Molina Laurence - Current progress in capturing real time emotions induced by exosome on human
17:05	Discussion
Symposium: Emotions in Interactions: How Emotions Shape and Are Shaped by Social Dynamics -	
16:05	Nöring Vanessa - Emotion, Interaction, Connection: A New Paradigm for Studying Social Dynamics
16:20	Grünjes Carlotta - Do Benefits of Social Interactions for Well-Being Differ Depending on Interaction Partner and Modality?
16:35	Ngombe Nicola - Heart-to-Heart: Exploring Physiological Co-Regulation in Couples Across Distinct Emotional Contexts
16:50	Von Großmann Alissa - If I Ask, Will You Tell Me? Perspective Seeking and Social Sharing of Emotion
17:05	Freitag Julia A. - Reading Minds or Reading Patterns: Schema Use in Younger and Older Adults' Empathic Accuracy

17:30-18:00 Farewells

Symposium Abstracts

Parallel Session 1 : T4

Session	Parallel Session 1
Track	T1
Time	11:15 - 12:15
Type	Talks
Title	Emotional and Sensory Modality Shift Chair: Xia Fang

Communication: **Pan Zhihe - Emotion Communication in Speech Prosody: The Role of Culture and Language Tone**

Abstract: Despite decades of research, the influence of cultural and linguistic diversity on emotional prosody remains incompletely understood. The present work examined how historical heterogeneity and language tone shape emotional prosody recognition across two studies. In Study 1, a reanalysis of 46 studies spanning 43 cultures revealed that emotional prosody from historically heterogeneous cultures was more accurately recognized by individuals from different cultural backgrounds than that from homogeneous cultures. Moreover, speakers of tonal languages demonstrated higher recognition accuracy compared to speakers of non-tonal languages. To further investigate the role of language tone in emotional prosody perception, Study 2 leveraged the diversity of Chinese dialects, which vary in the number of tones. A total of 223 participants fluent in dialects featuring 3 to 10 tones completed an emotional prosody recognition task and assessments of pitch, intensity, and duration sensitivity. The results showed that the number of dialect tones positively predicted emotion recognition accuracy, an effect fully mediated by sensitivity to intensity but not by pitch or duration. Collectively, these findings highlight the intertwined roles of culture and language in emotional prosody communication, underscoring the need to incorporate greater cultural and linguistic diversity in future research.

Communication: **Fang Xia - Bimodal Emotion Decoding: When Faces and Voices Diverge**

Abstract: Emotions are conveyed through facial expressions and vocal tones, but how do observers perceive overall emotion when these channels conflict? This research systematically investigated how individuals decode emotions in three representative incongruent pairings: anger-happiness, happiness-sadness, and anger-sadness. Across six preregistered experiments (N = 359), both multidimensional ratings and open-ended responses were collected to enable a comprehensive and nuanced examination of how conflicting emotional cues are integrated. The results showed a robust facial dominance effect in anger-happiness pairings, with participants primarily relying on facial cues to interpret emotion. In contrast, vocal cues became more dominant in shaping the emotional perception in anger-sadness pairings. The happiness-sadness pairing displayed a more complex pattern, as participants either perceived an alternative emotion or a blend of emotions. To explain these patterns, we proposed and tested the emotion similarity hypothesis, which suggests that the morphological and acoustic

similarities between emotional expressions facilitate the integration of facial and vocal cues into a unified emotional perception. These findings provide valuable insights into how conflicting emotional cues are resolved and offer a refined framework for studying bimodal emotion perception across contexts.

Communication: **Folyi Timea - Fine-grained affective experiences can occur spontaneously and involuntarily: Nine different types of affective feelings indirectly evoked by music**

Abstract: Do fine-grained affective experiences that go beyond broad affective dimensions (e.g., affective valence, arousal) or discrete emotions (e.g., happiness, sadness, fear) emerge as a result of reflective processing, or can they, despite their complexity, emerge as a result of “automatic” processing? The present study investigated whether complex and finely differentiated affective experiences evoked by music can arise spontaneously and involuntarily. Specifically, we focused on nine specific affective feelings that have been associated with music in self-report measures (e.g., feeling dreamy, serene, or heroic; Cowen et al., 2020), and we presented short (2000-2800 ms long) snippets of music that, according to self-report, predominantly evoke one of the nine feelings. Indirect processing conditions were realized in an affect misattribution procedure (e.g., Payne & Lundberg, 2014). In this task, the music snippets were presented as primes shortly before ambiguous targets, that is, abstract paintings that were previously rated as neutral in terms of valence and arousal. The task of the participants (N = 59) was to categorize the feeling evoked by the ambiguous pictures while ignoring the preceding primes. We calculated misattribution scores, which reflect biased responses towards the feeling associated with the task-irrelevant music. The results showed that the feelings associated with the music significantly biased the responses to the targets; significant misattribution effects emerged for all nine specific feelings. Responses in this procedure occurred when the music snippets were presented briefly and they were task-irrelevant. Thus, the music-induced affective experiences emerged spontaneously and under indirect processing conditions. Beyond the conceptualization of fine-grained affective experiences, our results may contribute to an understanding of the underlying processes of how such affective experiences might emerge. References Cowen, A. S., Fang, X., Sauter, D., & Keltner, D. (2020). What music makes us feel: At least 13 dimensions organize subjective experiences associated with music across different cultures. *Proceedings of the National Academy of Sciences*, 117(4), 1924–1934. <https://doi.org/10.1073/pnas.1910704117> Payne, K., & Lundberg, K. (2014). The Affect Misattribution Procedure: Ten Years of Evidence on Reliability, Validity, and Mechanisms: Affect Misattribution Procedure. *Social and Personality Psychology Compass*, 8(12), 672–686. <https://doi.org/10.1111/spc3.12148>

Communication: **Bell Meir Argaman - Social Context Shapes Facial Synchronization - A Virtual Reality Study**

Abstract: Facial synchronization is a key mechanism in social bonding, yet the role of social context remains underexplored. The current study employed a novel Virtual Reality (VR) paradigm to examine how relationship context (friends vs. strangers) influences facial activation and synchronization. By employing a controlled VR setting, this study overcomes key limitations of naturalistic paradigms, including reciprocal and task-driven synchronization effects. Participants (n= 107) were invited to a VR environment with a friend (n=52) or a stranger (n=55). They

were told that they were viewing the live facial expressions of their partner, while they are listening together to short audio clips. In reality, all participants were presented with identical pre-recorded avatar expressions, ensuring experimental control and eliminating reciprocal influences. Post-experiment, participants rated the avatars' realism, confirming they believed the avatars reflected their partner's expressions. Results show greater activation ($t(95) = 2.602$, $p = .011$) and synchronization ($t(103) = 2.76$, $p = 0.007$) of friends participants (vs strangers). Moreover, although enjoyment ratings did not differ significantly between groups, we found that the more participants were synched with the avatar, the more they enjoyed the audio clip ($t(105) = 4.277$, $p < .001$). These findings provide robust evidence that relationship context causally influences facial activation and synchronization. They further highlight the dynamic interplay between social context and non-verbal communication, offering insights with potential applications in social and clinical interventions.

Communication: **Discussion**

Parallel Session 1 : T5

Session	Parallel Session 1
Track	T1
Time	11:15 - 12:15
Type	Talks
Title	Emotional and Sensory Modality Shift Chair: Xia Fang

Communication: **Pan Zhihe - Emotion Communication in Speech Prosody: The Role of Culture and Language Tone**

Abstract: Despite decades of research, the influence of cultural and linguistic diversity on emotional prosody remains incompletely understood. The present work examined how historical heterogeneity and language tone shape emotional prosody recognition across two studies. In Study 1, a reanalysis of 46 studies spanning 43 cultures revealed that emotional prosody from historically heterogeneous cultures was more accurately recognized by individuals from different cultural backgrounds than that from homogeneous cultures. Moreover, speakers of tonal languages demonstrated higher recognition accuracy compared to speakers of non-tonal languages. To further investigate the role of language tone in emotional prosody perception, Study 2 leveraged the diversity of Chinese dialects, which vary in the number of tones. A total of 223 participants fluent in dialects featuring 3 to 10 tones completed an emotional prosody recognition task and assessments of pitch, intensity, and duration sensitivity. The results showed that the number of dialect tones positively predicted emotion recognition accuracy, an effect fully mediated by sensitivity to intensity but not by pitch or duration. Collectively, these findings highlight the intertwined roles of culture and language in emotional prosody communication, underscoring the need to incorporate greater cultural and linguistic diversity in future research.

Communication: **Fang Xia - Bimodal Emotion Decoding: When Faces and Voices Diverge**

Abstract: Emotions are conveyed through facial expressions and vocal tones, but how do observers perceive overall emotion when these channels conflict? This research systematically investigated how individuals decode emotions in three representative incongruent pairings: anger-happiness, happiness-sadness, and anger-sadness. Across six preregistered experiments (N = 359), both multidimensional ratings and open-ended responses were collected to enable a comprehensive and nuanced examination of how conflicting emotional cues are integrated. The results showed a robust facial dominance effect in anger-happiness pairings, with participants primarily relying on facial cues to interpret emotion. In contrast, vocal cues became more dominant in shaping the emotional perception in anger-sadness pairings. The happiness-sadness pairing displayed a more complex pattern, as participants either perceived an alternative emotion or a blend of emotions. To explain these patterns, we proposed and tested the emotion similarity hypothesis, which suggests that the morphological and acoustic

similarities between emotional expressions facilitate the integration of facial and vocal cues into a unified emotional perception. These findings provide valuable insights into how conflicting emotional cues are resolved and offer a refined framework for studying bimodal emotion perception across contexts.

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were told that they were viewing the live facial expressions of their partner, while they are listening together to short audio clips. In reality, all participants were presented with identical pre-recorded avatar expressions, ensuring experimental control and eliminating reciprocal influences. Post-experiment, participants rated the avatars' realism, confirming they believed the avatars reflected their partner's expressions. Results show greater activation ($t(95) = 2.602$, $p = .011$) and synchronization ($t(103) = 2.76$, $p = 0.007$) of friends participants (vs strangers). Moreover, although enjoyment ratings did not differ significantly between groups, we found that the more participants were synched with the avatar, the more they enjoyed the audio clip ($t(105) = 4.277$, $p < .001$). These findings provide robust evidence that relationship context causally influences facial activation and synchronization. They further highlight the dynamic interplay between social context and non-verbal communication, offering insights with potential applications in social and clinical interventions.

Communication: **Discussion**

Parallel Session 2 : T3

Session	Parallel Session 1
Track	T1
Time	11:15 - 12:15
Type	Talks
Title	Emotional and Sensory Modality Shift Chair: Xia Fang

Communication: **Pan Zhihe - Emotion Communication in Speech Prosody: The Role of Culture and Language Tone**

Abstract: Despite decades of research, the influence of cultural and linguistic diversity on emotional prosody remains incompletely understood. The present work examined how historical heterogeneity and language tone shape emotional prosody recognition across two studies. In Study 1, a reanalysis of 46 studies spanning 43 cultures revealed that emotional prosody from historically heterogeneous cultures was more accurately recognized by individuals from different cultural backgrounds than that from homogeneous cultures. Moreover, speakers of tonal languages demonstrated higher recognition accuracy compared to speakers of non-tonal languages. To further investigate the role of language tone in emotional prosody perception, Study 2 leveraged the diversity of Chinese dialects, which vary in the number of tones. A total of 223 participants fluent in dialects featuring 3 to 10 tones completed an emotional prosody recognition task and assessments of pitch, intensity, and duration sensitivity. The results showed that the number of dialect tones positively predicted emotion recognition accuracy, an effect fully mediated by sensitivity to intensity but not by pitch or duration. Collectively, these findings highlight the intertwined roles of culture and language in emotional prosody communication, underscoring the need to incorporate greater cultural and linguistic diversity in future research.

Communication: **Fang Xia - Bimodal Emotion Decoding: When Faces and Voices Diverge**

Abstract: Emotions are conveyed through facial expressions and vocal tones, but how do observers perceive overall emotion when these channels conflict? This research systematically investigated how individuals decode emotions in three representative incongruent pairings: anger-happiness, happiness-sadness, and anger-sadness. Across six preregistered experiments (N = 359), both multidimensional ratings and open-ended responses were collected to enable a comprehensive and nuanced examination of how conflicting emotional cues are integrated. The results showed a robust facial dominance effect in anger-happiness pairings, with participants primarily relying on facial cues to interpret emotion. In contrast, vocal cues became more dominant in shaping the emotional perception in anger-sadness pairings. The happiness-sadness pairing displayed a more complex pattern, as participants either perceived an alternative emotion or a blend of emotions. To explain these patterns, we proposed and tested the emotion similarity hypothesis, which suggests that the morphological and acoustic

similarities between emotional expressions facilitate the integration of facial and vocal cues into a unified emotional perception. These findings provide valuable insights into how conflicting emotional cues are resolved and offer a refined framework for studying bimodal emotion perception across contexts.

Communication: **Folyi Timea - Fine-grained affective experiences can occur spontaneously and involuntarily: Nine different types of affective feelings indirectly evoked by music**

Abstract: Do fine-grained affective experiences that go beyond broad affective dimensions (e.g., affective valence, arousal) or discrete emotions (e.g., happiness, sadness, fear) emerge as a result of reflective processing, or can they, despite their complexity, emerge as a result of “automatic” processing? The present study investigated whether complex and finely differentiated affective experiences evoked by music can arise spontaneously and involuntarily. Specifically, we focused on nine specific affective feelings that have been associated with music in self-report measures (e.g., feeling dreamy, serene, or heroic; Cowen et al., 2020), and we presented short (2000-2800 ms long) snippets of music that, according to self-report, predominantly evoke one of the nine feelings. Indirect processing conditions were realized in an affect misattribution procedure (e.g., Payne & Lundberg, 2014). In this task, the music snippets were presented as primes shortly before ambiguous targets, that is, abstract paintings that were previously rated as neutral in terms of valence and arousal. The task of the participants (N = 59) was to categorize the feeling evoked by the ambiguous pictures while ignoring the preceding primes. We calculated misattribution scores, which reflect biased responses towards the feeling associated with the task-irrelevant music. The results showed that the feelings associated with the music significantly biased the responses to the targets; significant misattribution effects emerged for all nine specific feelings. Responses in this procedure occurred when the music snippets were presented briefly and they were task-irrelevant. Thus, the music-induced affective experiences emerged spontaneously and under indirect processing conditions. Beyond the conceptualization of fine-grained affective experiences, our results may contribute to an understanding of the underlying processes of how such affective experiences might emerge. References Cowen, A. S., Fang, X., Sauter, D., & Keltner, D. (2020). What music makes us feel: At least 13 dimensions organize subjective experiences associated with music across different cultures. *Proceedings of the National Academy of Sciences*, 117(4), 1924–1934. <https://doi.org/10.1073/pnas.1910704117> Payne, K., & Lundberg, K. (2014). The Affect Misattribution Procedure: Ten Years of Evidence on Reliability, Validity, and Mechanisms: Affect Misattribution Procedure. *Social and Personality Psychology Compass*, 8(12), 672–686. <https://doi.org/10.1111/spc3.12148>

Communication: **Bell Meir Argaman - Social Context Shapes Facial Synchronization - A Virtual Reality Study**

Abstract: Facial synchronization is a key mechanism in social bonding, yet the role of social context remains underexplored. The current study employed a novel Virtual Reality (VR) paradigm to examine how relationship context (friends vs. strangers) influences facial activation and synchronization. By employing a controlled VR setting, this study overcomes key limitations of naturalistic paradigms, including reciprocal and task-driven synchronization effects. Participants (n= 107) were invited to a VR environment with a friend (n=52) or a stranger (n=55). They

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Communication: **Discussion**

Parallel Session 2 : T4

Session	Parallel Session 1
Track	T1
Time	11:15 - 12:15
Type	Talks
Title	Emotional and Sensory Modality Shift Chair: Xia Fang

Communication: **Pan Zhihe - Emotion Communication in Speech Prosody: The Role of Culture and Language Tone**

Abstract: Despite decades of research, the influence of cultural and linguistic diversity on emotional prosody remains incompletely understood. The present work examined how historical heterogeneity and language tone shape emotional prosody recognition across two studies. In Study 1, a reanalysis of 46 studies spanning 43 cultures revealed that emotional prosody from historically heterogeneous cultures was more accurately recognized by individuals from different cultural backgrounds than that from homogeneous cultures. Moreover, speakers of tonal languages demonstrated higher recognition accuracy compared to speakers of non-tonal languages. To further investigate the role of language tone in emotional prosody perception, Study 2 leveraged the diversity of Chinese dialects, which vary in the number of tones. A total of 223 participants fluent in dialects featuring 3 to 10 tones completed an emotional prosody recognition task and assessments of pitch, intensity, and duration sensitivity. The results showed that the number of dialect tones positively predicted emotion recognition accuracy, an effect fully mediated by sensitivity to intensity but not by pitch or duration. Collectively, these findings highlight the intertwined roles of culture and language in emotional prosody communication, underscoring the need to incorporate greater cultural and linguistic diversity in future research.

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similarities between emotional expressions facilitate the integration of facial and vocal cues into a unified emotional perception. These findings provide valuable insights into how conflicting emotional cues are resolved and offer a refined framework for studying bimodal emotion perception across contexts.

Communication: **Folyi Timea - Fine-grained affective experiences can occur spontaneously and involuntarily: Nine different types of affective feelings indirectly evoked by music**

Abstract: Do fine-grained affective experiences that go beyond broad affective dimensions (e.g., affective valence, arousal) or discrete emotions (e.g., happiness, sadness, fear) emerge as a result of reflective processing, or can they, despite their complexity, emerge as a result of “automatic” processing? The present study investigated whether complex and finely differentiated affective experiences evoked by music can arise spontaneously and involuntarily. Specifically, we focused on nine specific affective feelings that have been associated with music in self-report measures (e.g., feeling dreamy, serene, or heroic; Cowen et al., 2020), and we presented short (2000-2800 ms long) snippets of music that, according to self-report, predominantly evoke one of the nine feelings. Indirect processing conditions were realized in an affect misattribution procedure (e.g., Payne & Lundberg, 2014). In this task, the music snippets were presented as primes shortly before ambiguous targets, that is, abstract paintings that were previously rated as neutral in terms of valence and arousal. The task of the participants (N = 59) was to categorize the feeling evoked by the ambiguous pictures while ignoring the preceding primes. We calculated misattribution scores, which reflect biased responses towards the feeling associated with the task-irrelevant music. The results showed that the feelings associated with the music significantly biased the responses to the targets; significant misattribution effects emerged for all nine specific feelings. Responses in this procedure occurred when the music snippets were presented briefly and they were task-irrelevant. Thus, the music-induced affective experiences emerged spontaneously and under indirect processing conditions. Beyond the conceptualization of fine-grained affective experiences, our results may contribute to an understanding of the underlying processes of how such affective experiences might emerge. References Cowen, A. S., Fang, X., Sauter, D., & Keltner, D. (2020). What music makes us feel: At least 13 dimensions organize subjective experiences associated with music across different cultures. *Proceedings of the National Academy of Sciences*, 117(4), 1924–1934. <https://doi.org/10.1073/pnas.1910704117> Payne, K., & Lundberg, K. (2014). The Affect Misattribution Procedure: Ten Years of Evidence on Reliability, Validity, and Mechanisms: Affect Misattribution Procedure. *Social and Personality Psychology Compass*, 8(12), 672–686. <https://doi.org/10.1111/spc3.12148>

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Abstract: Facial synchronization is a key mechanism in social bonding, yet the role of social context remains underexplored. The current study employed a novel Virtual Reality (VR) paradigm to examine how relationship context (friends vs. strangers) influences facial activation and synchronization. By employing a controlled VR setting, this study overcomes key limitations of naturalistic paradigms, including reciprocal and task-driven synchronization effects. Participants (n= 107) were invited to a VR environment with a friend (n=52) or a stranger (n=55). They

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Communication: **Discussion**

Parallel Session 3 : T4

Session	Parallel Session 1
Track	T1
Time	11:15 - 12:15
Type	Talks
Title	Emotional and Sensory Modality Shift Chair: Xia Fang

Communication: **Pan Zhihe - Emotion Communication in Speech Prosody: The Role of Culture and Language Tone**

Abstract: Despite decades of research, the influence of cultural and linguistic diversity on emotional prosody remains incompletely understood. The present work examined how historical heterogeneity and language tone shape emotional prosody recognition across two studies. In Study 1, a reanalysis of 46 studies spanning 43 cultures revealed that emotional prosody from historically heterogeneous cultures was more accurately recognized by individuals from different cultural backgrounds than that from homogeneous cultures. Moreover, speakers of tonal languages demonstrated higher recognition accuracy compared to speakers of non-tonal languages. To further investigate the role of language tone in emotional prosody perception, Study 2 leveraged the diversity of Chinese dialects, which vary in the number of tones. A total of 223 participants fluent in dialects featuring 3 to 10 tones completed an emotional prosody recognition task and assessments of pitch, intensity, and duration sensitivity. The results showed that the number of dialect tones positively predicted emotion recognition accuracy, an effect fully mediated by sensitivity to intensity but not by pitch or duration. Collectively, these findings highlight the intertwined roles of culture and language in emotional prosody communication, underscoring the need to incorporate greater cultural and linguistic diversity in future research.

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Communication: **Discussion**

Parallel Session 3 : T5

Session	Parallel Session 1
Track	T1
Time	11:15 - 12:15
Type	Talks
Title	Emotional and Sensory Modality Shift Chair: Xia Fang

Communication: **Pan Zhihe - Emotion Communication in Speech Prosody: The Role of Culture and Language Tone**

Abstract: Despite decades of research, the influence of cultural and linguistic diversity on emotional prosody remains incompletely understood. The present work examined how historical heterogeneity and language tone shape emotional prosody recognition across two studies. In Study 1, a reanalysis of 46 studies spanning 43 cultures revealed that emotional prosody from historically heterogeneous cultures was more accurately recognized by individuals from different cultural backgrounds than that from homogeneous cultures. Moreover, speakers of tonal languages demonstrated higher recognition accuracy compared to speakers of non-tonal languages. To further investigate the role of language tone in emotional prosody perception, Study 2 leveraged the diversity of Chinese dialects, which vary in the number of tones. A total of 223 participants fluent in dialects featuring 3 to 10 tones completed an emotional prosody recognition task and assessments of pitch, intensity, and duration sensitivity. The results showed that the number of dialect tones positively predicted emotion recognition accuracy, an effect fully mediated by sensitivity to intensity but not by pitch or duration. Collectively, these findings highlight the intertwined roles of culture and language in emotional prosody communication, underscoring the need to incorporate greater cultural and linguistic diversity in future research.

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Communication: **Discussion**

Parallel Session 4 : T3

Session	Parallel Session 1
Track	T1
Time	11:15 - 12:15
Type	Talks
Title	Emotional and Sensory Modality Shift Chair: Xia Fang

Communication: **Pan Zhihe - Emotion Communication in Speech Prosody: The Role of Culture and Language Tone**

Abstract: Despite decades of research, the influence of cultural and linguistic diversity on emotional prosody remains incompletely understood. The present work examined how historical heterogeneity and language tone shape emotional prosody recognition across two studies. In Study 1, a reanalysis of 46 studies spanning 43 cultures revealed that emotional prosody from historically heterogeneous cultures was more accurately recognized by individuals from different cultural backgrounds than that from homogeneous cultures. Moreover, speakers of tonal languages demonstrated higher recognition accuracy compared to speakers of non-tonal languages. To further investigate the role of language tone in emotional prosody perception, Study 2 leveraged the diversity of Chinese dialects, which vary in the number of tones. A total of 223 participants fluent in dialects featuring 3 to 10 tones completed an emotional prosody recognition task and assessments of pitch, intensity, and duration sensitivity. The results showed that the number of dialect tones positively predicted emotion recognition accuracy, an effect fully mediated by sensitivity to intensity but not by pitch or duration. Collectively, these findings highlight the intertwined roles of culture and language in emotional prosody communication, underscoring the need to incorporate greater cultural and linguistic diversity in future research.

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Communication: **Discussion**

Parallel Session 4 : T4

Session	Parallel Session 1
Track	T1
Time	11:15 - 12:15
Type	Talks
Title	Emotional and Sensory Modality Shift Chair: Xia Fang

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Communication: **Folyi Timea - Fine-grained affective experiences can occur spontaneously and involuntarily: Nine different types of affective feelings indirectly evoked by music**

Abstract: Do fine-grained affective experiences that go beyond broad affective dimensions (e.g., affective valence, arousal) or discrete emotions (e.g., happiness, sadness, fear) emerge as a result of reflective processing, or can they, despite their complexity, emerge as a result of “automatic” processing? The present study investigated whether complex and finely differentiated affective experiences evoked by music can arise spontaneously and involuntarily. Specifically, we focused on nine specific affective feelings that have been associated with music in self-report measures (e.g., feeling dreamy, serene, or heroic; Cowen et al., 2020), and we presented short (2000-2800 ms long) snippets of music that, according to self-report, predominantly evoke one of the nine feelings. Indirect processing conditions were realized in an affect misattribution procedure (e.g., Payne & Lundberg, 2014). In this task, the music snippets were presented as primes shortly before ambiguous targets, that is, abstract paintings that were previously rated as neutral in terms of valence and arousal. The task of the participants (N = 59) was to categorize the feeling evoked by the ambiguous pictures while ignoring the preceding primes. We calculated misattribution scores, which reflect biased responses towards the feeling associated with the task-irrelevant music. The results showed that the feelings associated with the music significantly biased the responses to the targets; significant misattribution effects emerged for all nine specific feelings. Responses in this procedure occurred when the music snippets were presented briefly and they were task-irrelevant. Thus, the music-induced affective experiences emerged spontaneously and under indirect processing conditions. Beyond the conceptualization of fine-grained affective experiences, our results may contribute to an understanding of the underlying processes of how such affective experiences might emerge. References Cowen, A. S., Fang, X., Sauter, D., & Keltner, D. (2020). What music makes us feel: At least 13 dimensions organize subjective experiences associated with music across different cultures. *Proceedings of the National Academy of Sciences*, 117(4), 1924–1934. <https://doi.org/10.1073/pnas.1910704117> Payne, K., & Lundberg, K. (2014). The Affect Misattribution Procedure: Ten Years of Evidence on Reliability, Validity, and Mechanisms: Affect Misattribution Procedure. *Social and Personality Psychology Compass*, 8(12), 672–686. <https://doi.org/10.1111/spc3.12148>

Communication: **Bell Meir Argaman - Social Context Shapes Facial Synchronization - A Virtual Reality Study**

Abstract: Facial synchronization is a key mechanism in social bonding, yet the role of social context remains underexplored. The current study employed a novel Virtual Reality (VR) paradigm to examine how relationship context (friends vs. strangers) influences facial activation and synchronization. By employing a controlled VR setting, this study overcomes key limitations of naturalistic paradigms, including reciprocal and task-driven synchronization effects. Participants (n= 107) were invited to a VR environment with a friend (n=52) or a stranger (n=55). They

were told that they were viewing the live facial expressions of their partner, while they are listening together to short audio clips. In reality, all participants were presented with identical pre-recorded avatar expressions, ensuring experimental control and eliminating reciprocal influences. Post-experiment, participants rated the avatars' realism, confirming they believed the avatars reflected their partner's expressions. Results show greater activation ($t(95) = 2.602$, $p = .011$) and synchronization ($t(103) = 2.76$, $p = 0.007$) of friends participants (vs strangers). Moreover, although enjoyment ratings did not differ significantly between groups, we found that the more participants were synched with the avatar, the more they enjoyed the audio clip ($t(105) = 4.277$, $p < .001$). These findings provide robust evidence that relationship context causally influences facial activation and synchronization. They further highlight the dynamic interplay between social context and non-verbal communication, offering insights with potential applications in social and clinical interventions.

Communication: **Discussion**

Parallel Session 5 : T4

Session	Parallel Session 1
Track	T1
Time	11:15 - 12:15
Type	Talks
Title	Emotional and Sensory Modality Shift Chair: Xia Fang

Communication: **Pan Zhihe - Emotion Communication in Speech Prosody: The Role of Culture and Language Tone**

Abstract: Despite decades of research, the influence of cultural and linguistic diversity on emotional prosody remains incompletely understood. The present work examined how historical heterogeneity and language tone shape emotional prosody recognition across two studies. In Study 1, a reanalysis of 46 studies spanning 43 cultures revealed that emotional prosody from historically heterogeneous cultures was more accurately recognized by individuals from different cultural backgrounds than that from homogeneous cultures. Moreover, speakers of tonal languages demonstrated higher recognition accuracy compared to speakers of non-tonal languages. To further investigate the role of language tone in emotional prosody perception, Study 2 leveraged the diversity of Chinese dialects, which vary in the number of tones. A total of 223 participants fluent in dialects featuring 3 to 10 tones completed an emotional prosody recognition task and assessments of pitch, intensity, and duration sensitivity. The results showed that the number of dialect tones positively predicted emotion recognition accuracy, an effect fully mediated by sensitivity to intensity but not by pitch or duration. Collectively, these findings highlight the intertwined roles of culture and language in emotional prosody communication, underscoring the need to incorporate greater cultural and linguistic diversity in future research.

Communication: **Fang Xia - Bimodal Emotion Decoding: When Faces and Voices Diverge**

Abstract: Emotions are conveyed through facial expressions and vocal tones, but how do observers perceive overall emotion when these channels conflict? This research systematically investigated how individuals decode emotions in three representative incongruent pairings: anger-happiness, happiness-sadness, and anger-sadness. Across six preregistered experiments (N = 359), both multidimensional ratings and open-ended responses were collected to enable a comprehensive and nuanced examination of how conflicting emotional cues are integrated. The results showed a robust facial dominance effect in anger-happiness pairings, with participants primarily relying on facial cues to interpret emotion. In contrast, vocal cues became more dominant in shaping the emotional perception in anger-sadness pairings. The happiness-sadness pairing displayed a more complex pattern, as participants either perceived an alternative emotion or a blend of emotions. To explain these patterns, we proposed and tested the emotion similarity hypothesis, which suggests that the morphological and acoustic

similarities between emotional expressions facilitate the integration of facial and vocal cues into a unified emotional perception. These findings provide valuable insights into how conflicting emotional cues are resolved and offer a refined framework for studying bimodal emotion perception across contexts.

Communication: **Folyi Timea - Fine-grained affective experiences can occur spontaneously and involuntarily: Nine different types of affective feelings indirectly evoked by music**

Abstract: Do fine-grained affective experiences that go beyond broad affective dimensions (e.g., affective valence, arousal) or discrete emotions (e.g., happiness, sadness, fear) emerge as a result of reflective processing, or can they, despite their complexity, emerge as a result of “automatic” processing? The present study investigated whether complex and finely differentiated affective experiences evoked by music can arise spontaneously and involuntarily. Specifically, we focused on nine specific affective feelings that have been associated with music in self-report measures (e.g., feeling dreamy, serene, or heroic; Cowen et al., 2020), and we presented short (2000-2800 ms long) snippets of music that, according to self-report, predominantly evoke one of the nine feelings. Indirect processing conditions were realized in an affect misattribution procedure (e.g., Payne & Lundberg, 2014). In this task, the music snippets were presented as primes shortly before ambiguous targets, that is, abstract paintings that were previously rated as neutral in terms of valence and arousal. The task of the participants (N = 59) was to categorize the feeling evoked by the ambiguous pictures while ignoring the preceding primes. We calculated misattribution scores, which reflect biased responses towards the feeling associated with the task-irrelevant music. The results showed that the feelings associated with the music significantly biased the responses to the targets; significant misattribution effects emerged for all nine specific feelings. Responses in this procedure occurred when the music snippets were presented briefly and they were task-irrelevant. Thus, the music-induced affective experiences emerged spontaneously and under indirect processing conditions. Beyond the conceptualization of fine-grained affective experiences, our results may contribute to an understanding of the underlying processes of how such affective experiences might emerge. References Cowen, A. S., Fang, X., Sauter, D., & Keltner, D. (2020). What music makes us feel: At least 13 dimensions organize subjective experiences associated with music across different cultures. *Proceedings of the National Academy of Sciences*, 117(4), 1924–1934. <https://doi.org/10.1073/pnas.1910704117> Payne, K., & Lundberg, K. (2014). The Affect Misattribution Procedure: Ten Years of Evidence on Reliability, Validity, and Mechanisms: Affect Misattribution Procedure. *Social and Personality Psychology Compass*, 8(12), 672–686. <https://doi.org/10.1111/spc3.12148>

Communication: **Bell Meir Argaman - Social Context Shapes Facial Synchronization - A Virtual Reality Study**

Abstract: Facial synchronization is a key mechanism in social bonding, yet the role of social context remains underexplored. The current study employed a novel Virtual Reality (VR) paradigm to examine how relationship context (friends vs. strangers) influences facial activation and synchronization. By employing a controlled VR setting, this study overcomes key limitations of naturalistic paradigms, including reciprocal and task-driven synchronization effects. Participants (n= 107) were invited to a VR environment with a friend (n=52) or a stranger (n=55). They

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Communication: **Discussion**

Parallel Session 6 : T3

Session	Parallel Session 1
Track	T1
Time	11:15 - 12:15
Type	Talks
Title	Emotional and Sensory Modality Shift Chair: Xia Fang

Communication: **Pan Zhihe - Emotion Communication in Speech Prosody: The Role of Culture and Language Tone**

Abstract: Despite decades of research, the influence of cultural and linguistic diversity on emotional prosody remains incompletely understood. The present work examined how historical heterogeneity and language tone shape emotional prosody recognition across two studies. In Study 1, a reanalysis of 46 studies spanning 43 cultures revealed that emotional prosody from historically heterogeneous cultures was more accurately recognized by individuals from different cultural backgrounds than that from homogeneous cultures. Moreover, speakers of tonal languages demonstrated higher recognition accuracy compared to speakers of non-tonal languages. To further investigate the role of language tone in emotional prosody perception, Study 2 leveraged the diversity of Chinese dialects, which vary in the number of tones. A total of 223 participants fluent in dialects featuring 3 to 10 tones completed an emotional prosody recognition task and assessments of pitch, intensity, and duration sensitivity. The results showed that the number of dialect tones positively predicted emotion recognition accuracy, an effect fully mediated by sensitivity to intensity but not by pitch or duration. Collectively, these findings highlight the intertwined roles of culture and language in emotional prosody communication, underscoring the need to incorporate greater cultural and linguistic diversity in future research.

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Abstract: Emotions are conveyed through facial expressions and vocal tones, but how do observers perceive overall emotion when these channels conflict? This research systematically investigated how individuals decode emotions in three representative incongruent pairings: anger-happiness, happiness-sadness, and anger-sadness. Across six preregistered experiments (N = 359), both multidimensional ratings and open-ended responses were collected to enable a comprehensive and nuanced examination of how conflicting emotional cues are integrated. The results showed a robust facial dominance effect in anger-happiness pairings, with participants primarily relying on facial cues to interpret emotion. In contrast, vocal cues became more dominant in shaping the emotional perception in anger-sadness pairings. The happiness-sadness pairing displayed a more complex pattern, as participants either perceived an alternative emotion or a blend of emotions. To explain these patterns, we proposed and tested the emotion similarity hypothesis, which suggests that the morphological and acoustic

similarities between emotional expressions facilitate the integration of facial and vocal cues into a unified emotional perception. These findings provide valuable insights into how conflicting emotional cues are resolved and offer a refined framework for studying bimodal emotion perception across contexts.

Communication: **Folyi Timea - Fine-grained affective experiences can occur spontaneously and involuntarily: Nine different types of affective feelings indirectly evoked by music**

Abstract: Do fine-grained affective experiences that go beyond broad affective dimensions (e.g., affective valence, arousal) or discrete emotions (e.g., happiness, sadness, fear) emerge as a result of reflective processing, or can they, despite their complexity, emerge as a result of “automatic” processing? The present study investigated whether complex and finely differentiated affective experiences evoked by music can arise spontaneously and involuntarily. Specifically, we focused on nine specific affective feelings that have been associated with music in self-report measures (e.g., feeling dreamy, serene, or heroic; Cowen et al., 2020), and we presented short (2000-2800 ms long) snippets of music that, according to self-report, predominantly evoke one of the nine feelings. Indirect processing conditions were realized in an affect misattribution procedure (e.g., Payne & Lundberg, 2014). In this task, the music snippets were presented as primes shortly before ambiguous targets, that is, abstract paintings that were previously rated as neutral in terms of valence and arousal. The task of the participants (N = 59) was to categorize the feeling evoked by the ambiguous pictures while ignoring the preceding primes. We calculated misattribution scores, which reflect biased responses towards the feeling associated with the task-irrelevant music. The results showed that the feelings associated with the music significantly biased the responses to the targets; significant misattribution effects emerged for all nine specific feelings. Responses in this procedure occurred when the music snippets were presented briefly and they were task-irrelevant. Thus, the music-induced affective experiences emerged spontaneously and under indirect processing conditions. Beyond the conceptualization of fine-grained affective experiences, our results may contribute to an understanding of the underlying processes of how such affective experiences might emerge. References Cowen, A. S., Fang, X., Sauter, D., & Keltner, D. (2020). What music makes us feel: At least 13 dimensions organize subjective experiences associated with music across different cultures. *Proceedings of the National Academy of Sciences*, 117(4), 1924–1934. <https://doi.org/10.1073/pnas.1910704117> Payne, K., & Lundberg, K. (2014). The Affect Misattribution Procedure: Ten Years of Evidence on Reliability, Validity, and Mechanisms: Affect Misattribution Procedure. *Social and Personality Psychology Compass*, 8(12), 672–686. <https://doi.org/10.1111/spc3.12148>

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were told that they were viewing the live facial expressions of their partner, while they are listening together to short audio clips. In reality, all participants were presented with identical pre-recorded avatar expressions, ensuring experimental control and eliminating reciprocal influences. Post-experiment, participants rated the avatars' realism, confirming they believed the avatars reflected their partner's expressions. Results show greater activation ($t(95) = 2.602$, $p = .011$) and synchronization ($t(103) = 2.76$, $p = 0.007$) of friends participants (vs strangers). Moreover, although enjoyment ratings did not differ significantly between groups, we found that the more participants were synched with the avatar, the more they enjoyed the audio clip ($t(105) = 4.277$, $p < .001$). These findings provide robust evidence that relationship context causally influences facial activation and synchronization. They further highlight the dynamic interplay between social context and non-verbal communication, offering insights with potential applications in social and clinical interventions.

Communication: **Discussion**

Parallel Session 6 : T4

Session	Parallel Session 1
Track	T1
Time	11:15 - 12:15
Type	Talks
Title	Emotional and Sensory Modality Shift Chair: Xia Fang

Communication: **Pan Zhihe - Emotion Communication in Speech Prosody: The Role of Culture and Language Tone**

Abstract: Despite decades of research, the influence of cultural and linguistic diversity on emotional prosody remains incompletely understood. The present work examined how historical heterogeneity and language tone shape emotional prosody recognition across two studies. In Study 1, a reanalysis of 46 studies spanning 43 cultures revealed that emotional prosody from historically heterogeneous cultures was more accurately recognized by individuals from different cultural backgrounds than that from homogeneous cultures. Moreover, speakers of tonal languages demonstrated higher recognition accuracy compared to speakers of non-tonal languages. To further investigate the role of language tone in emotional prosody perception, Study 2 leveraged the diversity of Chinese dialects, which vary in the number of tones. A total of 223 participants fluent in dialects featuring 3 to 10 tones completed an emotional prosody recognition task and assessments of pitch, intensity, and duration sensitivity. The results showed that the number of dialect tones positively predicted emotion recognition accuracy, an effect fully mediated by sensitivity to intensity but not by pitch or duration. Collectively, these findings highlight the intertwined roles of culture and language in emotional prosody communication, underscoring the need to incorporate greater cultural and linguistic diversity in future research.

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Communication: **Discussion**

Parallel Session 6 : T5

Session	Parallel Session 1
Track	T1
Time	11:15 - 12:15
Type	Talks
Title	Emotional and Sensory Modality Shift Chair: Xia Fang

Communication: **Pan Zhihe - Emotion Communication in Speech Prosody: The Role of Culture and Language Tone**

Abstract: Despite decades of research, the influence of cultural and linguistic diversity on emotional prosody remains incompletely understood. The present work examined how historical heterogeneity and language tone shape emotional prosody recognition across two studies. In Study 1, a reanalysis of 46 studies spanning 43 cultures revealed that emotional prosody from historically heterogeneous cultures was more accurately recognized by individuals from different cultural backgrounds than that from homogeneous cultures. Moreover, speakers of tonal languages demonstrated higher recognition accuracy compared to speakers of non-tonal languages. To further investigate the role of language tone in emotional prosody perception, Study 2 leveraged the diversity of Chinese dialects, which vary in the number of tones. A total of 223 participants fluent in dialects featuring 3 to 10 tones completed an emotional prosody recognition task and assessments of pitch, intensity, and duration sensitivity. The results showed that the number of dialect tones positively predicted emotion recognition accuracy, an effect fully mediated by sensitivity to intensity but not by pitch or duration. Collectively, these findings highlight the intertwined roles of culture and language in emotional prosody communication, underscoring the need to incorporate greater cultural and linguistic diversity in future research.

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Communication: **Discussion**

Parallel Session 7 : T3

Session	Parallel Session 1
Track	T1
Time	11:15 - 12:15
Type	Talks
Title	Emotional and Sensory Modality Shift Chair: Xia Fang

Communication: **Pan Zhihe - Emotion Communication in Speech Prosody: The Role of Culture and Language Tone**

Abstract: Despite decades of research, the influence of cultural and linguistic diversity on emotional prosody remains incompletely understood. The present work examined how historical heterogeneity and language tone shape emotional prosody recognition across two studies. In Study 1, a reanalysis of 46 studies spanning 43 cultures revealed that emotional prosody from historically heterogeneous cultures was more accurately recognized by individuals from different cultural backgrounds than that from homogeneous cultures. Moreover, speakers of tonal languages demonstrated higher recognition accuracy compared to speakers of non-tonal languages. To further investigate the role of language tone in emotional prosody perception, Study 2 leveraged the diversity of Chinese dialects, which vary in the number of tones. A total of 223 participants fluent in dialects featuring 3 to 10 tones completed an emotional prosody recognition task and assessments of pitch, intensity, and duration sensitivity. The results showed that the number of dialect tones positively predicted emotion recognition accuracy, an effect fully mediated by sensitivity to intensity but not by pitch or duration. Collectively, these findings highlight the intertwined roles of culture and language in emotional prosody communication, underscoring the need to incorporate greater cultural and linguistic diversity in future research.

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Communication: **Folyi Timea - Fine-grained affective experiences can occur spontaneously and involuntarily: Nine different types of affective feelings indirectly evoked by music**

Abstract: Do fine-grained affective experiences that go beyond broad affective dimensions (e.g., affective valence, arousal) or discrete emotions (e.g., happiness, sadness, fear) emerge as a result of reflective processing, or can they, despite their complexity, emerge as a result of “automatic” processing? The present study investigated whether complex and finely differentiated affective experiences evoked by music can arise spontaneously and involuntarily. Specifically, we focused on nine specific affective feelings that have been associated with music in self-report measures (e.g., feeling dreamy, serene, or heroic; Cowen et al., 2020), and we presented short (2000-2800 ms long) snippets of music that, according to self-report, predominantly evoke one of the nine feelings. Indirect processing conditions were realized in an affect misattribution procedure (e.g., Payne & Lundberg, 2014). In this task, the music snippets were presented as primes shortly before ambiguous targets, that is, abstract paintings that were previously rated as neutral in terms of valence and arousal. The task of the participants (N = 59) was to categorize the feeling evoked by the ambiguous pictures while ignoring the preceding primes. We calculated misattribution scores, which reflect biased responses towards the feeling associated with the task-irrelevant music. The results showed that the feelings associated with the music significantly biased the responses to the targets; significant misattribution effects emerged for all nine specific feelings. Responses in this procedure occurred when the music snippets were presented briefly and they were task-irrelevant. Thus, the music-induced affective experiences emerged spontaneously and under indirect processing conditions. Beyond the conceptualization of fine-grained affective experiences, our results may contribute to an understanding of the underlying processes of how such affective experiences might emerge. References Cowen, A. S., Fang, X., Sauter, D., & Keltner, D. (2020). What music makes us feel: At least 13 dimensions organize subjective experiences associated with music across different cultures. *Proceedings of the National Academy of Sciences*, 117(4), 1924–1934. <https://doi.org/10.1073/pnas.1910704117> Payne, K., & Lundberg, K. (2014). The Affect Misattribution Procedure: Ten Years of Evidence on Reliability, Validity, and Mechanisms: Affect Misattribution Procedure. *Social and Personality Psychology Compass*, 8(12), 672–686. <https://doi.org/10.1111/spc3.12148>

Communication: **Bell Meir Argaman - Social Context Shapes Facial Synchronization - A Virtual Reality Study**

Abstract: Facial synchronization is a key mechanism in social bonding, yet the role of social context remains underexplored. The current study employed a novel Virtual Reality (VR) paradigm to examine how relationship context (friends vs. strangers) influences facial activation and synchronization. By employing a controlled VR setting, this study overcomes key limitations of naturalistic paradigms, including reciprocal and task-driven synchronization effects. Participants (n= 107) were invited to a VR environment with a friend (n=52) or a stranger (n=55). They

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Communication: **Discussion**

Parallel Session 8 : T3

Session	Parallel Session 1
Track	T1
Time	11:15 - 12:15
Type	Talks
Title	Emotional and Sensory Modality Shift Chair: Xia Fang

Communication: **Pan Zhihe - Emotion Communication in Speech Prosody: The Role of Culture and Language Tone**

Abstract: Despite decades of research, the influence of cultural and linguistic diversity on emotional prosody remains incompletely understood. The present work examined how historical heterogeneity and language tone shape emotional prosody recognition across two studies. In Study 1, a reanalysis of 46 studies spanning 43 cultures revealed that emotional prosody from historically heterogeneous cultures was more accurately recognized by individuals from different cultural backgrounds than that from homogeneous cultures. Moreover, speakers of tonal languages demonstrated higher recognition accuracy compared to speakers of non-tonal languages. To further investigate the role of language tone in emotional prosody perception, Study 2 leveraged the diversity of Chinese dialects, which vary in the number of tones. A total of 223 participants fluent in dialects featuring 3 to 10 tones completed an emotional prosody recognition task and assessments of pitch, intensity, and duration sensitivity. The results showed that the number of dialect tones positively predicted emotion recognition accuracy, an effect fully mediated by sensitivity to intensity but not by pitch or duration. Collectively, these findings highlight the intertwined roles of culture and language in emotional prosody communication, underscoring the need to incorporate greater cultural and linguistic diversity in future research.

Communication: **Fang Xia - Bimodal Emotion Decoding: When Faces and Voices Diverge**

Abstract: Emotions are conveyed through facial expressions and vocal tones, but how do observers perceive overall emotion when these channels conflict? This research systematically investigated how individuals decode emotions in three representative incongruent pairings: anger-happiness, happiness-sadness, and anger-sadness. Across six preregistered experiments (N = 359), both multidimensional ratings and open-ended responses were collected to enable a comprehensive and nuanced examination of how conflicting emotional cues are integrated. The results showed a robust facial dominance effect in anger-happiness pairings, with participants primarily relying on facial cues to interpret emotion. In contrast, vocal cues became more dominant in shaping the emotional perception in anger-sadness pairings. The happiness-sadness pairing displayed a more complex pattern, as participants either perceived an alternative emotion or a blend of emotions. To explain these patterns, we proposed and tested the emotion similarity hypothesis, which suggests that the morphological and acoustic

similarities between emotional expressions facilitate the integration of facial and vocal cues into a unified emotional perception. These findings provide valuable insights into how conflicting emotional cues are resolved and offer a refined framework for studying bimodal emotion perception across contexts.

Communication: **Folyi Timea - Fine-grained affective experiences can occur spontaneously and involuntarily: Nine different types of affective feelings indirectly evoked by music**

Abstract: Do fine-grained affective experiences that go beyond broad affective dimensions (e.g., affective valence, arousal) or discrete emotions (e.g., happiness, sadness, fear) emerge as a result of reflective processing, or can they, despite their complexity, emerge as a result of “automatic” processing? The present study investigated whether complex and finely differentiated affective experiences evoked by music can arise spontaneously and involuntarily. Specifically, we focused on nine specific affective feelings that have been associated with music in self-report measures (e.g., feeling dreamy, serene, or heroic; Cowen et al., 2020), and we presented short (2000-2800 ms long) snippets of music that, according to self-report, predominantly evoke one of the nine feelings. Indirect processing conditions were realized in an affect misattribution procedure (e.g., Payne & Lundberg, 2014). In this task, the music snippets were presented as primes shortly before ambiguous targets, that is, abstract paintings that were previously rated as neutral in terms of valence and arousal. The task of the participants (N = 59) was to categorize the feeling evoked by the ambiguous pictures while ignoring the preceding primes. We calculated misattribution scores, which reflect biased responses towards the feeling associated with the task-irrelevant music. The results showed that the feelings associated with the music significantly biased the responses to the targets; significant misattribution effects emerged for all nine specific feelings. Responses in this procedure occurred when the music snippets were presented briefly and they were task-irrelevant. Thus, the music-induced affective experiences emerged spontaneously and under indirect processing conditions. Beyond the conceptualization of fine-grained affective experiences, our results may contribute to an understanding of the underlying processes of how such affective experiences might emerge. References Cowen, A. S., Fang, X., Sauter, D., & Keltner, D. (2020). What music makes us feel: At least 13 dimensions organize subjective experiences associated with music across different cultures. *Proceedings of the National Academy of Sciences*, 117(4), 1924–1934. <https://doi.org/10.1073/pnas.1910704117> Payne, K., & Lundberg, K. (2014). The Affect Misattribution Procedure: Ten Years of Evidence on Reliability, Validity, and Mechanisms: Affect Misattribution Procedure. *Social and Personality Psychology Compass*, 8(12), 672–686. <https://doi.org/10.1111/spc3.12148>

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Communication: **Discussion**

Parallel Session 9 : T2

Session	Parallel Session 1
Track	T1
Time	11:15 - 12:15
Type	Talks
Title	Emotional and Sensory Modality Shift Chair: Xia Fang

Communication: **Pan Zhihe - Emotion Communication in Speech Prosody: The Role of Culture and Language Tone**

Abstract: Despite decades of research, the influence of cultural and linguistic diversity on emotional prosody remains incompletely understood. The present work examined how historical heterogeneity and language tone shape emotional prosody recognition across two studies. In Study 1, a reanalysis of 46 studies spanning 43 cultures revealed that emotional prosody from historically heterogeneous cultures was more accurately recognized by individuals from different cultural backgrounds than that from homogeneous cultures. Moreover, speakers of tonal languages demonstrated higher recognition accuracy compared to speakers of non-tonal languages. To further investigate the role of language tone in emotional prosody perception, Study 2 leveraged the diversity of Chinese dialects, which vary in the number of tones. A total of 223 participants fluent in dialects featuring 3 to 10 tones completed an emotional prosody recognition task and assessments of pitch, intensity, and duration sensitivity. The results showed that the number of dialect tones positively predicted emotion recognition accuracy, an effect fully mediated by sensitivity to intensity but not by pitch or duration. Collectively, these findings highlight the intertwined roles of culture and language in emotional prosody communication, underscoring the need to incorporate greater cultural and linguistic diversity in future research.

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Communication: **Discussion**

Parallel Session 9 : T3

Session	Parallel Session 1
Track	T1
Time	11:15 - 12:15
Type	Talks
Title	Emotional and Sensory Modality Shift Chair: Xia Fang

Communication: **Pan Zhihe - Emotion Communication in Speech Prosody: The Role of Culture and Language Tone**

Abstract: Despite decades of research, the influence of cultural and linguistic diversity on emotional prosody remains incompletely understood. The present work examined how historical heterogeneity and language tone shape emotional prosody recognition across two studies. In Study 1, a reanalysis of 46 studies spanning 43 cultures revealed that emotional prosody from historically heterogeneous cultures was more accurately recognized by individuals from different cultural backgrounds than that from homogeneous cultures. Moreover, speakers of tonal languages demonstrated higher recognition accuracy compared to speakers of non-tonal languages. To further investigate the role of language tone in emotional prosody perception, Study 2 leveraged the diversity of Chinese dialects, which vary in the number of tones. A total of 223 participants fluent in dialects featuring 3 to 10 tones completed an emotional prosody recognition task and assessments of pitch, intensity, and duration sensitivity. The results showed that the number of dialect tones positively predicted emotion recognition accuracy, an effect fully mediated by sensitivity to intensity but not by pitch or duration. Collectively, these findings highlight the intertwined roles of culture and language in emotional prosody communication, underscoring the need to incorporate greater cultural and linguistic diversity in future research.

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Communication: **Discussion**

Talks Abstracts

Parallel Session 1 : T1

Session	Parallel Session 1
Track	T1
Time	11:15 - 12:15
Type	Talks
Title	Emotional and Sensory Modality Shift Chair: Xia Fang

Communication: **Pan Zhihe - Emotion Communication in Speech Prosody: The Role of Culture and Language Tone**

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Communication: **Discussion**

Parallel Session 1 : T2

Session	Parallel Session 1
Track	T1
Time	11:15 - 12:15
Type	Talks
Title	Emotional and Sensory Modality Shift Chair: Xia Fang

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Communication: **Folyi Timea - Fine-grained affective experiences can occur spontaneously and involuntarily: Nine different types of affective feelings indirectly evoked by music**

Abstract: Do fine-grained affective experiences that go beyond broad affective dimensions (e.g., affective valence, arousal) or discrete emotions (e.g., happiness, sadness, fear) emerge as a result of reflective processing, or can they, despite their complexity, emerge as a result of “automatic” processing? The present study investigated whether complex and finely differentiated affective experiences evoked by music can arise spontaneously and involuntarily. Specifically, we focused on nine specific affective feelings that have been associated with music in self-report measures (e.g., feeling dreamy, serene, or heroic; Cowen et al., 2020), and we presented short (2000-2800 ms long) snippets of music that, according to self-report, predominantly evoke one of the nine feelings. Indirect processing conditions were realized in an affect misattribution procedure (e.g., Payne & Lundberg, 2014). In this task, the music snippets were presented as primes shortly before ambiguous targets, that is, abstract paintings that were previously rated as neutral in terms of valence and arousal. The task of the participants (N = 59) was to categorize the feeling evoked by the ambiguous pictures while ignoring the preceding primes. We calculated misattribution scores, which reflect biased responses towards the feeling associated with the task-irrelevant music. The results showed that the feelings associated with the music significantly biased the responses to the targets; significant misattribution effects emerged for all nine specific feelings. Responses in this procedure occurred when the music snippets were presented briefly and they were task-irrelevant. Thus, the music-induced affective experiences emerged spontaneously and under indirect processing conditions. Beyond the conceptualization of fine-grained affective experiences, our results may contribute to an understanding of the underlying processes of how such affective experiences might emerge. References Cowen, A. S., Fang, X., Sauter, D., & Keltner, D. (2020). What music makes us feel: At least 13 dimensions organize subjective experiences associated with music across different cultures. *Proceedings of the National Academy of Sciences*, 117(4), 1924–1934. <https://doi.org/10.1073/pnas.1910704117> Payne, K., & Lundberg, K. (2014). The Affect Misattribution Procedure: Ten Years of Evidence on Reliability, Validity, and Mechanisms: Affect Misattribution Procedure. *Social and Personality Psychology Compass*, 8(12), 672–686. <https://doi.org/10.1111/spc3.12148>

Communication: **Bell Meir Argaman - Social Context Shapes Facial Synchronization - A Virtual Reality Study**

Abstract: Facial synchronization is a key mechanism in social bonding, yet the role of social context remains underexplored. The current study employed a novel Virtual Reality (VR) paradigm to examine how relationship context (friends vs. strangers) influences facial activation and synchronization. By employing a controlled VR setting, this study overcomes key limitations of naturalistic paradigms, including reciprocal and task-driven synchronization effects. Participants (n= 107) were invited to a VR environment with a friend (n=52) or a stranger (n=55). They

were told that they were viewing the live facial expressions of their partner, while they are listening together to short audio clips. In reality, all participants were presented with identical pre-recorded avatar expressions, ensuring experimental control and eliminating reciprocal influences. Post-experiment, participants rated the avatars' realism, confirming they believed the avatars reflected their partner's expressions. Results show greater activation ($t(95) = 2.602$, $p = .011$) and synchronization ($t(103) = 2.76$, $p = 0.007$) of friends participants (vs strangers). Moreover, although enjoyment ratings did not differ significantly between groups, we found that the more participants were synched with the avatar, the more they enjoyed the audio clip ($t(105) = 4.277$, $p < .001$). These findings provide robust evidence that relationship context causally influences facial activation and synchronization. They further highlight the dynamic interplay between social context and non-verbal communication, offering insights with potential applications in social and clinical interventions.

Communication: **Discussion**

Parallel Session 1 : T3

Session	Parallel Session 1
Track	T1
Time	11:15 - 12:15
Type	Talks
Title	Emotional and Sensory Modality Shift Chair: Xia Fang

Communication: **Pan Zhihe - Emotion Communication in Speech Prosody: The Role of Culture and Language Tone**

Abstract: Despite decades of research, the influence of cultural and linguistic diversity on emotional prosody remains incompletely understood. The present work examined how historical heterogeneity and language tone shape emotional prosody recognition across two studies. In Study 1, a reanalysis of 46 studies spanning 43 cultures revealed that emotional prosody from historically heterogeneous cultures was more accurately recognized by individuals from different cultural backgrounds than that from homogeneous cultures. Moreover, speakers of tonal languages demonstrated higher recognition accuracy compared to speakers of non-tonal languages. To further investigate the role of language tone in emotional prosody perception, Study 2 leveraged the diversity of Chinese dialects, which vary in the number of tones. A total of 223 participants fluent in dialects featuring 3 to 10 tones completed an emotional prosody recognition task and assessments of pitch, intensity, and duration sensitivity. The results showed that the number of dialect tones positively predicted emotion recognition accuracy, an effect fully mediated by sensitivity to intensity but not by pitch or duration. Collectively, these findings highlight the intertwined roles of culture and language in emotional prosody communication, underscoring the need to incorporate greater cultural and linguistic diversity in future research.

Communication: **Fang Xia - Bimodal Emotion Decoding: When Faces and Voices Diverge**

Abstract: Emotions are conveyed through facial expressions and vocal tones, but how do observers perceive overall emotion when these channels conflict? This research systematically investigated how individuals decode emotions in three representative incongruent pairings: anger-happiness, happiness-sadness, and anger-sadness. Across six preregistered experiments (N = 359), both multidimensional ratings and open-ended responses were collected to enable a comprehensive and nuanced examination of how conflicting emotional cues are integrated. The results showed a robust facial dominance effect in anger-happiness pairings, with participants primarily relying on facial cues to interpret emotion. In contrast, vocal cues became more dominant in shaping the emotional perception in anger-sadness pairings. The happiness-sadness pairing displayed a more complex pattern, as participants either perceived an alternative emotion or a blend of emotions. To explain these patterns, we proposed and tested the emotion similarity hypothesis, which suggests that the morphological and acoustic

similarities between emotional expressions facilitate the integration of facial and vocal cues into a unified emotional perception. These findings provide valuable insights into how conflicting emotional cues are resolved and offer a refined framework for studying bimodal emotion perception across contexts.

Communication: **Folyi Timea - Fine-grained affective experiences can occur spontaneously and involuntarily: Nine different types of affective feelings indirectly evoked by music**

Abstract: Do fine-grained affective experiences that go beyond broad affective dimensions (e.g., affective valence, arousal) or discrete emotions (e.g., happiness, sadness, fear) emerge as a result of reflective processing, or can they, despite their complexity, emerge as a result of “automatic” processing? The present study investigated whether complex and finely differentiated affective experiences evoked by music can arise spontaneously and involuntarily. Specifically, we focused on nine specific affective feelings that have been associated with music in self-report measures (e.g., feeling dreamy, serene, or heroic; Cowen et al., 2020), and we presented short (2000-2800 ms long) snippets of music that, according to self-report, predominantly evoke one of the nine feelings. Indirect processing conditions were realized in an affect misattribution procedure (e.g., Payne & Lundberg, 2014). In this task, the music snippets were presented as primes shortly before ambiguous targets, that is, abstract paintings that were previously rated as neutral in terms of valence and arousal. The task of the participants (N = 59) was to categorize the feeling evoked by the ambiguous pictures while ignoring the preceding primes. We calculated misattribution scores, which reflect biased responses towards the feeling associated with the task-irrelevant music. The results showed that the feelings associated with the music significantly biased the responses to the targets; significant misattribution effects emerged for all nine specific feelings. Responses in this procedure occurred when the music snippets were presented briefly and they were task-irrelevant. Thus, the music-induced affective experiences emerged spontaneously and under indirect processing conditions. Beyond the conceptualization of fine-grained affective experiences, our results may contribute to an understanding of the underlying processes of how such affective experiences might emerge. References Cowen, A. S., Fang, X., Sauter, D., & Keltner, D. (2020). What music makes us feel: At least 13 dimensions organize subjective experiences associated with music across different cultures. *Proceedings of the National Academy of Sciences*, 117(4), 1924–1934. <https://doi.org/10.1073/pnas.1910704117> Payne, K., & Lundberg, K. (2014). The Affect Misattribution Procedure: Ten Years of Evidence on Reliability, Validity, and Mechanisms: Affect Misattribution Procedure. *Social and Personality Psychology Compass*, 8(12), 672–686. <https://doi.org/10.1111/spc3.12148>

Communication: **Bell Meir Argaman - Social Context Shapes Facial Synchronization - A Virtual Reality Study**

Abstract: Facial synchronization is a key mechanism in social bonding, yet the role of social context remains underexplored. The current study employed a novel Virtual Reality (VR) paradigm to examine how relationship context (friends vs. strangers) influences facial activation and synchronization. By employing a controlled VR setting, this study overcomes key limitations of naturalistic paradigms, including reciprocal and task-driven synchronization effects. Participants (n= 107) were invited to a VR environment with a friend (n=52) or a stranger (n=55). They

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Communication: **Discussion**

Parallel Session 1 : T4

Session	Parallel Session 1
Track	T1
Time	11:15 - 12:15
Type	Talks
Title	Emotional and Sensory Modality Shift Chair: Xia Fang

Communication: **Pan Zhihe - Emotion Communication in Speech Prosody: The Role of Culture and Language Tone**

Abstract: Despite decades of research, the influence of cultural and linguistic diversity on emotional prosody remains incompletely understood. The present work examined how historical heterogeneity and language tone shape emotional prosody recognition across two studies. In Study 1, a reanalysis of 46 studies spanning 43 cultures revealed that emotional prosody from historically heterogeneous cultures was more accurately recognized by individuals from different cultural backgrounds than that from homogeneous cultures. Moreover, speakers of tonal languages demonstrated higher recognition accuracy compared to speakers of non-tonal languages. To further investigate the role of language tone in emotional prosody perception, Study 2 leveraged the diversity of Chinese dialects, which vary in the number of tones. A total of 223 participants fluent in dialects featuring 3 to 10 tones completed an emotional prosody recognition task and assessments of pitch, intensity, and duration sensitivity. The results showed that the number of dialect tones positively predicted emotion recognition accuracy, an effect fully mediated by sensitivity to intensity but not by pitch or duration. Collectively, these findings highlight the intertwined roles of culture and language in emotional prosody communication, underscoring the need to incorporate greater cultural and linguistic diversity in future research.

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Abstract: Emotions are conveyed through facial expressions and vocal tones, but how do observers perceive overall emotion when these channels conflict? This research systematically investigated how individuals decode emotions in three representative incongruent pairings: anger-happiness, happiness-sadness, and anger-sadness. Across six preregistered experiments (N = 359), both multidimensional ratings and open-ended responses were collected to enable a comprehensive and nuanced examination of how conflicting emotional cues are integrated. The results showed a robust facial dominance effect in anger-happiness pairings, with participants primarily relying on facial cues to interpret emotion. In contrast, vocal cues became more dominant in shaping the emotional perception in anger-sadness pairings. The happiness-sadness pairing displayed a more complex pattern, as participants either perceived an alternative emotion or a blend of emotions. To explain these patterns, we proposed and tested the emotion similarity hypothesis, which suggests that the morphological and acoustic

similarities between emotional expressions facilitate the integration of facial and vocal cues into a unified emotional perception. These findings provide valuable insights into how conflicting emotional cues are resolved and offer a refined framework for studying bimodal emotion perception across contexts.

Communication: **Folyi Timea - Fine-grained affective experiences can occur spontaneously and involuntarily: Nine different types of affective feelings indirectly evoked by music**

Abstract: Do fine-grained affective experiences that go beyond broad affective dimensions (e.g., affective valence, arousal) or discrete emotions (e.g., happiness, sadness, fear) emerge as a result of reflective processing, or can they, despite their complexity, emerge as a result of “automatic” processing? The present study investigated whether complex and finely differentiated affective experiences evoked by music can arise spontaneously and involuntarily. Specifically, we focused on nine specific affective feelings that have been associated with music in self-report measures (e.g., feeling dreamy, serene, or heroic; Cowen et al., 2020), and we presented short (2000-2800 ms long) snippets of music that, according to self-report, predominantly evoke one of the nine feelings. Indirect processing conditions were realized in an affect misattribution procedure (e.g., Payne & Lundberg, 2014). In this task, the music snippets were presented as primes shortly before ambiguous targets, that is, abstract paintings that were previously rated as neutral in terms of valence and arousal. The task of the participants (N = 59) was to categorize the feeling evoked by the ambiguous pictures while ignoring the preceding primes. We calculated misattribution scores, which reflect biased responses towards the feeling associated with the task-irrelevant music. The results showed that the feelings associated with the music significantly biased the responses to the targets; significant misattribution effects emerged for all nine specific feelings. Responses in this procedure occurred when the music snippets were presented briefly and they were task-irrelevant. Thus, the music-induced affective experiences emerged spontaneously and under indirect processing conditions. Beyond the conceptualization of fine-grained affective experiences, our results may contribute to an understanding of the underlying processes of how such affective experiences might emerge. References Cowen, A. S., Fang, X., Sauter, D., & Keltner, D. (2020). What music makes us feel: At least 13 dimensions organize subjective experiences associated with music across different cultures. *Proceedings of the National Academy of Sciences*, 117(4), 1924–1934. <https://doi.org/10.1073/pnas.1910704117> Payne, K., & Lundberg, K. (2014). The Affect Misattribution Procedure: Ten Years of Evidence on Reliability, Validity, and Mechanisms: Affect Misattribution Procedure. *Social and Personality Psychology Compass*, 8(12), 672–686. <https://doi.org/10.1111/spc3.12148>

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Communication: **Discussion**

Parallel Session 1 : T5

Session	Parallel Session 1
Track	T1
Time	11:15 - 12:15
Type	Talks
Title	Emotional and Sensory Modality Shift Chair: Xia Fang

Communication: **Pan Zhihe - Emotion Communication in Speech Prosody: The Role of Culture and Language Tone**

Abstract: Despite decades of research, the influence of cultural and linguistic diversity on emotional prosody remains incompletely understood. The present work examined how historical heterogeneity and language tone shape emotional prosody recognition across two studies. In Study 1, a reanalysis of 46 studies spanning 43 cultures revealed that emotional prosody from historically heterogeneous cultures was more accurately recognized by individuals from different cultural backgrounds than that from homogeneous cultures. Moreover, speakers of tonal languages demonstrated higher recognition accuracy compared to speakers of non-tonal languages. To further investigate the role of language tone in emotional prosody perception, Study 2 leveraged the diversity of Chinese dialects, which vary in the number of tones. A total of 223 participants fluent in dialects featuring 3 to 10 tones completed an emotional prosody recognition task and assessments of pitch, intensity, and duration sensitivity. The results showed that the number of dialect tones positively predicted emotion recognition accuracy, an effect fully mediated by sensitivity to intensity but not by pitch or duration. Collectively, these findings highlight the intertwined roles of culture and language in emotional prosody communication, underscoring the need to incorporate greater cultural and linguistic diversity in future research.

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Communication: **Discussion**

Parallel Session 2 : T1

Session	Parallel Session 1
Track	T1
Time	11:15 - 12:15
Type	Talks
Title	Emotional and Sensory Modality Shift Chair: Xia Fang

Communication: **Pan Zhihe - Emotion Communication in Speech Prosody: The Role of Culture and Language Tone**

Abstract: Despite decades of research, the influence of cultural and linguistic diversity on emotional prosody remains incompletely understood. The present work examined how historical heterogeneity and language tone shape emotional prosody recognition across two studies. In Study 1, a reanalysis of 46 studies spanning 43 cultures revealed that emotional prosody from historically heterogeneous cultures was more accurately recognized by individuals from different cultural backgrounds than that from homogeneous cultures. Moreover, speakers of tonal languages demonstrated higher recognition accuracy compared to speakers of non-tonal languages. To further investigate the role of language tone in emotional prosody perception, Study 2 leveraged the diversity of Chinese dialects, which vary in the number of tones. A total of 223 participants fluent in dialects featuring 3 to 10 tones completed an emotional prosody recognition task and assessments of pitch, intensity, and duration sensitivity. The results showed that the number of dialect tones positively predicted emotion recognition accuracy, an effect fully mediated by sensitivity to intensity but not by pitch or duration. Collectively, these findings highlight the intertwined roles of culture and language in emotional prosody communication, underscoring the need to incorporate greater cultural and linguistic diversity in future research.

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Communication: **Discussion**

Parallel Session 2 : T2

Session	Parallel Session 1
Track	T1
Time	11:15 - 12:15
Type	Talks
Title	Emotional and Sensory Modality Shift Chair: Xia Fang

Communication: **Pan Zhihe - Emotion Communication in Speech Prosody: The Role of Culture and Language Tone**

Abstract: Despite decades of research, the influence of cultural and linguistic diversity on emotional prosody remains incompletely understood. The present work examined how historical heterogeneity and language tone shape emotional prosody recognition across two studies. In Study 1, a reanalysis of 46 studies spanning 43 cultures revealed that emotional prosody from historically heterogeneous cultures was more accurately recognized by individuals from different cultural backgrounds than that from homogeneous cultures. Moreover, speakers of tonal languages demonstrated higher recognition accuracy compared to speakers of non-tonal languages. To further investigate the role of language tone in emotional prosody perception, Study 2 leveraged the diversity of Chinese dialects, which vary in the number of tones. A total of 223 participants fluent in dialects featuring 3 to 10 tones completed an emotional prosody recognition task and assessments of pitch, intensity, and duration sensitivity. The results showed that the number of dialect tones positively predicted emotion recognition accuracy, an effect fully mediated by sensitivity to intensity but not by pitch or duration. Collectively, these findings highlight the intertwined roles of culture and language in emotional prosody communication, underscoring the need to incorporate greater cultural and linguistic diversity in future research.

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Communication: **Folyi Timea - Fine-grained affective experiences can occur spontaneously and involuntarily: Nine different types of affective feelings indirectly evoked by music**

Abstract: Do fine-grained affective experiences that go beyond broad affective dimensions (e.g., affective valence, arousal) or discrete emotions (e.g., happiness, sadness, fear) emerge as a result of reflective processing, or can they, despite their complexity, emerge as a result of “automatic” processing? The present study investigated whether complex and finely differentiated affective experiences evoked by music can arise spontaneously and involuntarily. Specifically, we focused on nine specific affective feelings that have been associated with music in self-report measures (e.g., feeling dreamy, serene, or heroic; Cowen et al., 2020), and we presented short (2000-2800 ms long) snippets of music that, according to self-report, predominantly evoke one of the nine feelings. Indirect processing conditions were realized in an affect misattribution procedure (e.g., Payne & Lundberg, 2014). In this task, the music snippets were presented as primes shortly before ambiguous targets, that is, abstract paintings that were previously rated as neutral in terms of valence and arousal. The task of the participants (N = 59) was to categorize the feeling evoked by the ambiguous pictures while ignoring the preceding primes. We calculated misattribution scores, which reflect biased responses towards the feeling associated with the task-irrelevant music. The results showed that the feelings associated with the music significantly biased the responses to the targets; significant misattribution effects emerged for all nine specific feelings. Responses in this procedure occurred when the music snippets were presented briefly and they were task-irrelevant. Thus, the music-induced affective experiences emerged spontaneously and under indirect processing conditions. Beyond the conceptualization of fine-grained affective experiences, our results may contribute to an understanding of the underlying processes of how such affective experiences might emerge. References Cowen, A. S., Fang, X., Sauter, D., & Keltner, D. (2020). What music makes us feel: At least 13 dimensions organize subjective experiences associated with music across different cultures. *Proceedings of the National Academy of Sciences*, 117(4), 1924–1934. <https://doi.org/10.1073/pnas.1910704117> Payne, K., & Lundberg, K. (2014). The Affect Misattribution Procedure: Ten Years of Evidence on Reliability, Validity, and Mechanisms: Affect Misattribution Procedure. *Social and Personality Psychology Compass*, 8(12), 672–686. <https://doi.org/10.1111/spc3.12148>

Communication: **Bell Meir Argaman - Social Context Shapes Facial Synchronization - A Virtual Reality Study**

Abstract: Facial synchronization is a key mechanism in social bonding, yet the role of social context remains underexplored. The current study employed a novel Virtual Reality (VR) paradigm to examine how relationship context (friends vs. strangers) influences facial activation and synchronization. By employing a controlled VR setting, this study overcomes key limitations of naturalistic paradigms, including reciprocal and task-driven synchronization effects. Participants (n= 107) were invited to a VR environment with a friend (n=52) or a stranger (n=55). They

were told that they were viewing the live facial expressions of their partner, while they are listening together to short audio clips. In reality, all participants were presented with identical pre-recorded avatar expressions, ensuring experimental control and eliminating reciprocal influences. Post-experiment, participants rated the avatars' realism, confirming they believed the avatars reflected their partner's expressions. Results show greater activation ($t(95) = 2.602$, $p = .011$) and synchronization ($t(103) = 2.76$, $p = 0.007$) of friends participants (vs strangers). Moreover, although enjoyment ratings did not differ significantly between groups, we found that the more participants were synched with the avatar, the more they enjoyed the audio clip ($t(105) = 4.277$, $p < .001$). These findings provide robust evidence that relationship context causally influences facial activation and synchronization. They further highlight the dynamic interplay between social context and non-verbal communication, offering insights with potential applications in social and clinical interventions.

Communication: **Discussion**

Parallel Session 2 : T3

Session	Parallel Session 1
Track	T1
Time	11:15 - 12:15
Type	Talks
Title	Emotional and Sensory Modality Shift Chair: Xia Fang

Communication: **Pan Zhihe - Emotion Communication in Speech Prosody: The Role of Culture and Language Tone**

Abstract: Despite decades of research, the influence of cultural and linguistic diversity on emotional prosody remains incompletely understood. The present work examined how historical heterogeneity and language tone shape emotional prosody recognition across two studies. In Study 1, a reanalysis of 46 studies spanning 43 cultures revealed that emotional prosody from historically heterogeneous cultures was more accurately recognized by individuals from different cultural backgrounds than that from homogeneous cultures. Moreover, speakers of tonal languages demonstrated higher recognition accuracy compared to speakers of non-tonal languages. To further investigate the role of language tone in emotional prosody perception, Study 2 leveraged the diversity of Chinese dialects, which vary in the number of tones. A total of 223 participants fluent in dialects featuring 3 to 10 tones completed an emotional prosody recognition task and assessments of pitch, intensity, and duration sensitivity. The results showed that the number of dialect tones positively predicted emotion recognition accuracy, an effect fully mediated by sensitivity to intensity but not by pitch or duration. Collectively, these findings highlight the intertwined roles of culture and language in emotional prosody communication, underscoring the need to incorporate greater cultural and linguistic diversity in future research.

Communication: **Fang Xia - Bimodal Emotion Decoding: When Faces and Voices Diverge**

Abstract: Emotions are conveyed through facial expressions and vocal tones, but how do observers perceive overall emotion when these channels conflict? This research systematically investigated how individuals decode emotions in three representative incongruent pairings: anger-happiness, happiness-sadness, and anger-sadness. Across six preregistered experiments (N = 359), both multidimensional ratings and open-ended responses were collected to enable a comprehensive and nuanced examination of how conflicting emotional cues are integrated. The results showed a robust facial dominance effect in anger-happiness pairings, with participants primarily relying on facial cues to interpret emotion. In contrast, vocal cues became more dominant in shaping the emotional perception in anger-sadness pairings. The happiness-sadness pairing displayed a more complex pattern, as participants either perceived an alternative emotion or a blend of emotions. To explain these patterns, we proposed and tested the emotion similarity hypothesis, which suggests that the morphological and acoustic

similarities between emotional expressions facilitate the integration of facial and vocal cues into a unified emotional perception. These findings provide valuable insights into how conflicting emotional cues are resolved and offer a refined framework for studying bimodal emotion perception across contexts.

Communication: **Folyi Timea - Fine-grained affective experiences can occur spontaneously and involuntarily: Nine different types of affective feelings indirectly evoked by music**

Abstract: Do fine-grained affective experiences that go beyond broad affective dimensions (e.g., affective valence, arousal) or discrete emotions (e.g., happiness, sadness, fear) emerge as a result of reflective processing, or can they, despite their complexity, emerge as a result of “automatic” processing? The present study investigated whether complex and finely differentiated affective experiences evoked by music can arise spontaneously and involuntarily. Specifically, we focused on nine specific affective feelings that have been associated with music in self-report measures (e.g., feeling dreamy, serene, or heroic; Cowen et al., 2020), and we presented short (2000-2800 ms long) snippets of music that, according to self-report, predominantly evoke one of the nine feelings. Indirect processing conditions were realized in an affect misattribution procedure (e.g., Payne & Lundberg, 2014). In this task, the music snippets were presented as primes shortly before ambiguous targets, that is, abstract paintings that were previously rated as neutral in terms of valence and arousal. The task of the participants (N = 59) was to categorize the feeling evoked by the ambiguous pictures while ignoring the preceding primes. We calculated misattribution scores, which reflect biased responses towards the feeling associated with the task-irrelevant music. The results showed that the feelings associated with the music significantly biased the responses to the targets; significant misattribution effects emerged for all nine specific feelings. Responses in this procedure occurred when the music snippets were presented briefly and they were task-irrelevant. Thus, the music-induced affective experiences emerged spontaneously and under indirect processing conditions. Beyond the conceptualization of fine-grained affective experiences, our results may contribute to an understanding of the underlying processes of how such affective experiences might emerge. References Cowen, A. S., Fang, X., Sauter, D., & Keltner, D. (2020). What music makes us feel: At least 13 dimensions organize subjective experiences associated with music across different cultures. *Proceedings of the National Academy of Sciences*, 117(4), 1924–1934. <https://doi.org/10.1073/pnas.1910704117> Payne, K., & Lundberg, K. (2014). The Affect Misattribution Procedure: Ten Years of Evidence on Reliability, Validity, and Mechanisms: Affect Misattribution Procedure. *Social and Personality Psychology Compass*, 8(12), 672–686. <https://doi.org/10.1111/spc3.12148>

Communication: **Bell Meir Argaman - Social Context Shapes Facial Synchronization - A Virtual Reality Study**

Abstract: Facial synchronization is a key mechanism in social bonding, yet the role of social context remains underexplored. The current study employed a novel Virtual Reality (VR) paradigm to examine how relationship context (friends vs. strangers) influences facial activation and synchronization. By employing a controlled VR setting, this study overcomes key limitations of naturalistic paradigms, including reciprocal and task-driven synchronization effects. Participants (n= 107) were invited to a VR environment with a friend (n=52) or a stranger (n=55). They

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Communication: **Discussion**

Parallel Session 2 : T4

Session	Parallel Session 1
Track	T1
Time	11:15 - 12:15
Type	Talks
Title	Emotional and Sensory Modality Shift Chair: Xia Fang

Communication: **Pan Zhihe - Emotion Communication in Speech Prosody: The Role of Culture and Language Tone**

Abstract: Despite decades of research, the influence of cultural and linguistic diversity on emotional prosody remains incompletely understood. The present work examined how historical heterogeneity and language tone shape emotional prosody recognition across two studies. In Study 1, a reanalysis of 46 studies spanning 43 cultures revealed that emotional prosody from historically heterogeneous cultures was more accurately recognized by individuals from different cultural backgrounds than that from homogeneous cultures. Moreover, speakers of tonal languages demonstrated higher recognition accuracy compared to speakers of non-tonal languages. To further investigate the role of language tone in emotional prosody perception, Study 2 leveraged the diversity of Chinese dialects, which vary in the number of tones. A total of 223 participants fluent in dialects featuring 3 to 10 tones completed an emotional prosody recognition task and assessments of pitch, intensity, and duration sensitivity. The results showed that the number of dialect tones positively predicted emotion recognition accuracy, an effect fully mediated by sensitivity to intensity but not by pitch or duration. Collectively, these findings highlight the intertwined roles of culture and language in emotional prosody communication, underscoring the need to incorporate greater cultural and linguistic diversity in future research.

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Abstract: Emotions are conveyed through facial expressions and vocal tones, but how do observers perceive overall emotion when these channels conflict? This research systematically investigated how individuals decode emotions in three representative incongruent pairings: anger-happiness, happiness-sadness, and anger-sadness. Across six preregistered experiments (N = 359), both multidimensional ratings and open-ended responses were collected to enable a comprehensive and nuanced examination of how conflicting emotional cues are integrated. The results showed a robust facial dominance effect in anger-happiness pairings, with participants primarily relying on facial cues to interpret emotion. In contrast, vocal cues became more dominant in shaping the emotional perception in anger-sadness pairings. The happiness-sadness pairing displayed a more complex pattern, as participants either perceived an alternative emotion or a blend of emotions. To explain these patterns, we proposed and tested the emotion similarity hypothesis, which suggests that the morphological and acoustic

similarities between emotional expressions facilitate the integration of facial and vocal cues into a unified emotional perception. These findings provide valuable insights into how conflicting emotional cues are resolved and offer a refined framework for studying bimodal emotion perception across contexts.

Communication: **Folyi Timea - Fine-grained affective experiences can occur spontaneously and involuntarily: Nine different types of affective feelings indirectly evoked by music**

Abstract: Do fine-grained affective experiences that go beyond broad affective dimensions (e.g., affective valence, arousal) or discrete emotions (e.g., happiness, sadness, fear) emerge as a result of reflective processing, or can they, despite their complexity, emerge as a result of “automatic” processing? The present study investigated whether complex and finely differentiated affective experiences evoked by music can arise spontaneously and involuntarily. Specifically, we focused on nine specific affective feelings that have been associated with music in self-report measures (e.g., feeling dreamy, serene, or heroic; Cowen et al., 2020), and we presented short (2000-2800 ms long) snippets of music that, according to self-report, predominantly evoke one of the nine feelings. Indirect processing conditions were realized in an affect misattribution procedure (e.g., Payne & Lundberg, 2014). In this task, the music snippets were presented as primes shortly before ambiguous targets, that is, abstract paintings that were previously rated as neutral in terms of valence and arousal. The task of the participants (N = 59) was to categorize the feeling evoked by the ambiguous pictures while ignoring the preceding primes. We calculated misattribution scores, which reflect biased responses towards the feeling associated with the task-irrelevant music. The results showed that the feelings associated with the music significantly biased the responses to the targets; significant misattribution effects emerged for all nine specific feelings. Responses in this procedure occurred when the music snippets were presented briefly and they were task-irrelevant. Thus, the music-induced affective experiences emerged spontaneously and under indirect processing conditions. Beyond the conceptualization of fine-grained affective experiences, our results may contribute to an understanding of the underlying processes of how such affective experiences might emerge. References Cowen, A. S., Fang, X., Sauter, D., & Keltner, D. (2020). What music makes us feel: At least 13 dimensions organize subjective experiences associated with music across different cultures. *Proceedings of the National Academy of Sciences*, 117(4), 1924–1934. <https://doi.org/10.1073/pnas.1910704117> Payne, K., & Lundberg, K. (2014). The Affect Misattribution Procedure: Ten Years of Evidence on Reliability, Validity, and Mechanisms: Affect Misattribution Procedure. *Social and Personality Psychology Compass*, 8(12), 672–686. <https://doi.org/10.1111/spc3.12148>

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Communication: **Discussion**

Parallel Session 2 : T5

Session	Parallel Session 1
Track	T1
Time	11:15 - 12:15
Type	Talks
Title	Emotional and Sensory Modality Shift Chair: Xia Fang

Communication: **Pan Zhihe - Emotion Communication in Speech Prosody: The Role of Culture and Language Tone**

Abstract: Despite decades of research, the influence of cultural and linguistic diversity on emotional prosody remains incompletely understood. The present work examined how historical heterogeneity and language tone shape emotional prosody recognition across two studies. In Study 1, a reanalysis of 46 studies spanning 43 cultures revealed that emotional prosody from historically heterogeneous cultures was more accurately recognized by individuals from different cultural backgrounds than that from homogeneous cultures. Moreover, speakers of tonal languages demonstrated higher recognition accuracy compared to speakers of non-tonal languages. To further investigate the role of language tone in emotional prosody perception, Study 2 leveraged the diversity of Chinese dialects, which vary in the number of tones. A total of 223 participants fluent in dialects featuring 3 to 10 tones completed an emotional prosody recognition task and assessments of pitch, intensity, and duration sensitivity. The results showed that the number of dialect tones positively predicted emotion recognition accuracy, an effect fully mediated by sensitivity to intensity but not by pitch or duration. Collectively, these findings highlight the intertwined roles of culture and language in emotional prosody communication, underscoring the need to incorporate greater cultural and linguistic diversity in future research.

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Communication: **Discussion**

Parallel Session 3 : T1

Session	Parallel Session 1
Track	T1
Time	11:15 - 12:15
Type	Talks
Title	Emotional and Sensory Modality Shift Chair: Xia Fang

Communication: **Pan Zhihe - Emotion Communication in Speech Prosody: The Role of Culture and Language Tone**

Abstract: Despite decades of research, the influence of cultural and linguistic diversity on emotional prosody remains incompletely understood. The present work examined how historical heterogeneity and language tone shape emotional prosody recognition across two studies. In Study 1, a reanalysis of 46 studies spanning 43 cultures revealed that emotional prosody from historically heterogeneous cultures was more accurately recognized by individuals from different cultural backgrounds than that from homogeneous cultures. Moreover, speakers of tonal languages demonstrated higher recognition accuracy compared to speakers of non-tonal languages. To further investigate the role of language tone in emotional prosody perception, Study 2 leveraged the diversity of Chinese dialects, which vary in the number of tones. A total of 223 participants fluent in dialects featuring 3 to 10 tones completed an emotional prosody recognition task and assessments of pitch, intensity, and duration sensitivity. The results showed that the number of dialect tones positively predicted emotion recognition accuracy, an effect fully mediated by sensitivity to intensity but not by pitch or duration. Collectively, these findings highlight the intertwined roles of culture and language in emotional prosody communication, underscoring the need to incorporate greater cultural and linguistic diversity in future research.

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Communication: **Discussion**

Parallel Session 3 : T2

Session	Parallel Session 1
Track	T1
Time	11:15 - 12:15
Type	Talks
Title	Emotional and Sensory Modality Shift Chair: Xia Fang

Communication: **Pan Zhihe - Emotion Communication in Speech Prosody: The Role of Culture and Language Tone**

Abstract: Despite decades of research, the influence of cultural and linguistic diversity on emotional prosody remains incompletely understood. The present work examined how historical heterogeneity and language tone shape emotional prosody recognition across two studies. In Study 1, a reanalysis of 46 studies spanning 43 cultures revealed that emotional prosody from historically heterogeneous cultures was more accurately recognized by individuals from different cultural backgrounds than that from homogeneous cultures. Moreover, speakers of tonal languages demonstrated higher recognition accuracy compared to speakers of non-tonal languages. To further investigate the role of language tone in emotional prosody perception, Study 2 leveraged the diversity of Chinese dialects, which vary in the number of tones. A total of 223 participants fluent in dialects featuring 3 to 10 tones completed an emotional prosody recognition task and assessments of pitch, intensity, and duration sensitivity. The results showed that the number of dialect tones positively predicted emotion recognition accuracy, an effect fully mediated by sensitivity to intensity but not by pitch or duration. Collectively, these findings highlight the intertwined roles of culture and language in emotional prosody communication, underscoring the need to incorporate greater cultural and linguistic diversity in future research.

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Communication: **Folyi Timea - Fine-grained affective experiences can occur spontaneously and involuntarily: Nine different types of affective feelings indirectly evoked by music**

Abstract: Do fine-grained affective experiences that go beyond broad affective dimensions (e.g., affective valence, arousal) or discrete emotions (e.g., happiness, sadness, fear) emerge as a result of reflective processing, or can they, despite their complexity, emerge as a result of “automatic” processing? The present study investigated whether complex and finely differentiated affective experiences evoked by music can arise spontaneously and involuntarily. Specifically, we focused on nine specific affective feelings that have been associated with music in self-report measures (e.g., feeling dreamy, serene, or heroic; Cowen et al., 2020), and we presented short (2000-2800 ms long) snippets of music that, according to self-report, predominantly evoke one of the nine feelings. Indirect processing conditions were realized in an affect misattribution procedure (e.g., Payne & Lundberg, 2014). In this task, the music snippets were presented as primes shortly before ambiguous targets, that is, abstract paintings that were previously rated as neutral in terms of valence and arousal. The task of the participants (N = 59) was to categorize the feeling evoked by the ambiguous pictures while ignoring the preceding primes. We calculated misattribution scores, which reflect biased responses towards the feeling associated with the task-irrelevant music. The results showed that the feelings associated with the music significantly biased the responses to the targets; significant misattribution effects emerged for all nine specific feelings. Responses in this procedure occurred when the music snippets were presented briefly and they were task-irrelevant. Thus, the music-induced affective experiences emerged spontaneously and under indirect processing conditions. Beyond the conceptualization of fine-grained affective experiences, our results may contribute to an understanding of the underlying processes of how such affective experiences might emerge. References Cowen, A. S., Fang, X., Sauter, D., & Keltner, D. (2020). What music makes us feel: At least 13 dimensions organize subjective experiences associated with music across different cultures. *Proceedings of the National Academy of Sciences*, 117(4), 1924–1934. <https://doi.org/10.1073/pnas.1910704117> Payne, K., & Lundberg, K. (2014). The Affect Misattribution Procedure: Ten Years of Evidence on Reliability, Validity, and Mechanisms: Affect Misattribution Procedure. *Social and Personality Psychology Compass*, 8(12), 672–686. <https://doi.org/10.1111/spc3.12148>

Communication: **Bell Meir Argaman - Social Context Shapes Facial Synchronization - A Virtual Reality Study**

Abstract: Facial synchronization is a key mechanism in social bonding, yet the role of social context remains underexplored. The current study employed a novel Virtual Reality (VR) paradigm to examine how relationship context (friends vs. strangers) influences facial activation and synchronization. By employing a controlled VR setting, this study overcomes key limitations of naturalistic paradigms, including reciprocal and task-driven synchronization effects. Participants (n= 107) were invited to a VR environment with a friend (n=52) or a stranger (n=55). They

were told that they were viewing the live facial expressions of their partner, while they are listening together to short audio clips. In reality, all participants were presented with identical pre-recorded avatar expressions, ensuring experimental control and eliminating reciprocal influences. Post-experiment, participants rated the avatars' realism, confirming they believed the avatars reflected their partner's expressions. Results show greater activation ($t(95) = 2.602$, $p = .011$) and synchronization ($t(103) = 2.76$, $p = 0.007$) of friends participants (vs strangers). Moreover, although enjoyment ratings did not differ significantly between groups, we found that the more participants were synched with the avatar, the more they enjoyed the audio clip ($t(105) = 4.277$, $p < .001$). These findings provide robust evidence that relationship context causally influences facial activation and synchronization. They further highlight the dynamic interplay between social context and non-verbal communication, offering insights with potential applications in social and clinical interventions.

Communication: **Discussion**

Parallel Session 3 : T3

Session	Parallel Session 1
Track	T1
Time	11:15 - 12:15
Type	Talks
Title	Emotional and Sensory Modality Shift Chair: Xia Fang

Communication: **Pan Zhihe - Emotion Communication in Speech Prosody: The Role of Culture and Language Tone**

Abstract: Despite decades of research, the influence of cultural and linguistic diversity on emotional prosody remains incompletely understood. The present work examined how historical heterogeneity and language tone shape emotional prosody recognition across two studies. In Study 1, a reanalysis of 46 studies spanning 43 cultures revealed that emotional prosody from historically heterogeneous cultures was more accurately recognized by individuals from different cultural backgrounds than that from homogeneous cultures. Moreover, speakers of tonal languages demonstrated higher recognition accuracy compared to speakers of non-tonal languages. To further investigate the role of language tone in emotional prosody perception, Study 2 leveraged the diversity of Chinese dialects, which vary in the number of tones. A total of 223 participants fluent in dialects featuring 3 to 10 tones completed an emotional prosody recognition task and assessments of pitch, intensity, and duration sensitivity. The results showed that the number of dialect tones positively predicted emotion recognition accuracy, an effect fully mediated by sensitivity to intensity but not by pitch or duration. Collectively, these findings highlight the intertwined roles of culture and language in emotional prosody communication, underscoring the need to incorporate greater cultural and linguistic diversity in future research.

Communication: **Fang Xia - Bimodal Emotion Decoding: When Faces and Voices Diverge**

Abstract: Emotions are conveyed through facial expressions and vocal tones, but how do observers perceive overall emotion when these channels conflict? This research systematically investigated how individuals decode emotions in three representative incongruent pairings: anger-happiness, happiness-sadness, and anger-sadness. Across six preregistered experiments (N = 359), both multidimensional ratings and open-ended responses were collected to enable a comprehensive and nuanced examination of how conflicting emotional cues are integrated. The results showed a robust facial dominance effect in anger-happiness pairings, with participants primarily relying on facial cues to interpret emotion. In contrast, vocal cues became more dominant in shaping the emotional perception in anger-sadness pairings. The happiness-sadness pairing displayed a more complex pattern, as participants either perceived an alternative emotion or a blend of emotions. To explain these patterns, we proposed and tested the emotion similarity hypothesis, which suggests that the morphological and acoustic

similarities between emotional expressions facilitate the integration of facial and vocal cues into a unified emotional perception. These findings provide valuable insights into how conflicting emotional cues are resolved and offer a refined framework for studying bimodal emotion perception across contexts.

Communication: **Folyi Timea - Fine-grained affective experiences can occur spontaneously and involuntarily: Nine different types of affective feelings indirectly evoked by music**

Abstract: Do fine-grained affective experiences that go beyond broad affective dimensions (e.g., affective valence, arousal) or discrete emotions (e.g., happiness, sadness, fear) emerge as a result of reflective processing, or can they, despite their complexity, emerge as a result of “automatic” processing? The present study investigated whether complex and finely differentiated affective experiences evoked by music can arise spontaneously and involuntarily. Specifically, we focused on nine specific affective feelings that have been associated with music in self-report measures (e.g., feeling dreamy, serene, or heroic; Cowen et al., 2020), and we presented short (2000-2800 ms long) snippets of music that, according to self-report, predominantly evoke one of the nine feelings. Indirect processing conditions were realized in an affect misattribution procedure (e.g., Payne & Lundberg, 2014). In this task, the music snippets were presented as primes shortly before ambiguous targets, that is, abstract paintings that were previously rated as neutral in terms of valence and arousal. The task of the participants (N = 59) was to categorize the feeling evoked by the ambiguous pictures while ignoring the preceding primes. We calculated misattribution scores, which reflect biased responses towards the feeling associated with the task-irrelevant music. The results showed that the feelings associated with the music significantly biased the responses to the targets; significant misattribution effects emerged for all nine specific feelings. Responses in this procedure occurred when the music snippets were presented briefly and they were task-irrelevant. Thus, the music-induced affective experiences emerged spontaneously and under indirect processing conditions. Beyond the conceptualization of fine-grained affective experiences, our results may contribute to an understanding of the underlying processes of how such affective experiences might emerge. References Cowen, A. S., Fang, X., Sauter, D., & Keltner, D. (2020). What music makes us feel: At least 13 dimensions organize subjective experiences associated with music across different cultures. *Proceedings of the National Academy of Sciences*, 117(4), 1924–1934. <https://doi.org/10.1073/pnas.1910704117> Payne, K., & Lundberg, K. (2014). The Affect Misattribution Procedure: Ten Years of Evidence on Reliability, Validity, and Mechanisms: Affect Misattribution Procedure. *Social and Personality Psychology Compass*, 8(12), 672–686. <https://doi.org/10.1111/spc3.12148>

Communication: **Bell Meir Argaman - Social Context Shapes Facial Synchronization - A Virtual Reality Study**

Abstract: Facial synchronization is a key mechanism in social bonding, yet the role of social context remains underexplored. The current study employed a novel Virtual Reality (VR) paradigm to examine how relationship context (friends vs. strangers) influences facial activation and synchronization. By employing a controlled VR setting, this study overcomes key limitations of naturalistic paradigms, including reciprocal and task-driven synchronization effects. Participants (n= 107) were invited to a VR environment with a friend (n=52) or a stranger (n=55). They

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Communication: **Discussion**

Parallel Session 3 : T4

Session	Parallel Session 1
Track	T1
Time	11:15 - 12:15
Type	Talks
Title	Emotional and Sensory Modality Shift Chair: Xia Fang

Communication: **Pan Zhihe - Emotion Communication in Speech Prosody: The Role of Culture and Language Tone**

Abstract: Despite decades of research, the influence of cultural and linguistic diversity on emotional prosody remains incompletely understood. The present work examined how historical heterogeneity and language tone shape emotional prosody recognition across two studies. In Study 1, a reanalysis of 46 studies spanning 43 cultures revealed that emotional prosody from historically heterogeneous cultures was more accurately recognized by individuals from different cultural backgrounds than that from homogeneous cultures. Moreover, speakers of tonal languages demonstrated higher recognition accuracy compared to speakers of non-tonal languages. To further investigate the role of language tone in emotional prosody perception, Study 2 leveraged the diversity of Chinese dialects, which vary in the number of tones. A total of 223 participants fluent in dialects featuring 3 to 10 tones completed an emotional prosody recognition task and assessments of pitch, intensity, and duration sensitivity. The results showed that the number of dialect tones positively predicted emotion recognition accuracy, an effect fully mediated by sensitivity to intensity but not by pitch or duration. Collectively, these findings highlight the intertwined roles of culture and language in emotional prosody communication, underscoring the need to incorporate greater cultural and linguistic diversity in future research.

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Abstract: Emotions are conveyed through facial expressions and vocal tones, but how do observers perceive overall emotion when these channels conflict? This research systematically investigated how individuals decode emotions in three representative incongruent pairings: anger-happiness, happiness-sadness, and anger-sadness. Across six preregistered experiments (N = 359), both multidimensional ratings and open-ended responses were collected to enable a comprehensive and nuanced examination of how conflicting emotional cues are integrated. The results showed a robust facial dominance effect in anger-happiness pairings, with participants primarily relying on facial cues to interpret emotion. In contrast, vocal cues became more dominant in shaping the emotional perception in anger-sadness pairings. The happiness-sadness pairing displayed a more complex pattern, as participants either perceived an alternative emotion or a blend of emotions. To explain these patterns, we proposed and tested the emotion similarity hypothesis, which suggests that the morphological and acoustic

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Communication: **Folyi Timea - Fine-grained affective experiences can occur spontaneously and involuntarily: Nine different types of affective feelings indirectly evoked by music**

Abstract: Do fine-grained affective experiences that go beyond broad affective dimensions (e.g., affective valence, arousal) or discrete emotions (e.g., happiness, sadness, fear) emerge as a result of reflective processing, or can they, despite their complexity, emerge as a result of “automatic” processing? The present study investigated whether complex and finely differentiated affective experiences evoked by music can arise spontaneously and involuntarily. Specifically, we focused on nine specific affective feelings that have been associated with music in self-report measures (e.g., feeling dreamy, serene, or heroic; Cowen et al., 2020), and we presented short (2000-2800 ms long) snippets of music that, according to self-report, predominantly evoke one of the nine feelings. Indirect processing conditions were realized in an affect misattribution procedure (e.g., Payne & Lundberg, 2014). In this task, the music snippets were presented as primes shortly before ambiguous targets, that is, abstract paintings that were previously rated as neutral in terms of valence and arousal. The task of the participants (N = 59) was to categorize the feeling evoked by the ambiguous pictures while ignoring the preceding primes. We calculated misattribution scores, which reflect biased responses towards the feeling associated with the task-irrelevant music. The results showed that the feelings associated with the music significantly biased the responses to the targets; significant misattribution effects emerged for all nine specific feelings. Responses in this procedure occurred when the music snippets were presented briefly and they were task-irrelevant. Thus, the music-induced affective experiences emerged spontaneously and under indirect processing conditions. Beyond the conceptualization of fine-grained affective experiences, our results may contribute to an understanding of the underlying processes of how such affective experiences might emerge. References Cowen, A. S., Fang, X., Sauter, D., & Keltner, D. (2020). What music makes us feel: At least 13 dimensions organize subjective experiences associated with music across different cultures. *Proceedings of the National Academy of Sciences*, 117(4), 1924–1934. <https://doi.org/10.1073/pnas.1910704117> Payne, K., & Lundberg, K. (2014). The Affect Misattribution Procedure: Ten Years of Evidence on Reliability, Validity, and Mechanisms: Affect Misattribution Procedure. *Social and Personality Psychology Compass*, 8(12), 672–686. <https://doi.org/10.1111/spc3.12148>

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Communication: **Discussion**

Parallel Session 3 : T5

Session	Parallel Session 1
Track	T1
Time	11:15 - 12:15
Type	Talks
Title	Emotional and Sensory Modality Shift Chair: Xia Fang

Communication: **Pan Zhihe - Emotion Communication in Speech Prosody: The Role of Culture and Language Tone**

Abstract: Despite decades of research, the influence of cultural and linguistic diversity on emotional prosody remains incompletely understood. The present work examined how historical heterogeneity and language tone shape emotional prosody recognition across two studies. In Study 1, a reanalysis of 46 studies spanning 43 cultures revealed that emotional prosody from historically heterogeneous cultures was more accurately recognized by individuals from different cultural backgrounds than that from homogeneous cultures. Moreover, speakers of tonal languages demonstrated higher recognition accuracy compared to speakers of non-tonal languages. To further investigate the role of language tone in emotional prosody perception, Study 2 leveraged the diversity of Chinese dialects, which vary in the number of tones. A total of 223 participants fluent in dialects featuring 3 to 10 tones completed an emotional prosody recognition task and assessments of pitch, intensity, and duration sensitivity. The results showed that the number of dialect tones positively predicted emotion recognition accuracy, an effect fully mediated by sensitivity to intensity but not by pitch or duration. Collectively, these findings highlight the intertwined roles of culture and language in emotional prosody communication, underscoring the need to incorporate greater cultural and linguistic diversity in future research.

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Communication: **Discussion**

Parallel Session 4 : T1

Session	Parallel Session 1
Track	T1
Time	11:15 - 12:15
Type	Talks
Title	Emotional and Sensory Modality Shift Chair: Xia Fang

Communication: **Pan Zhihe - Emotion Communication in Speech Prosody: The Role of Culture and Language Tone**

Abstract: Despite decades of research, the influence of cultural and linguistic diversity on emotional prosody remains incompletely understood. The present work examined how historical heterogeneity and language tone shape emotional prosody recognition across two studies. In Study 1, a reanalysis of 46 studies spanning 43 cultures revealed that emotional prosody from historically heterogeneous cultures was more accurately recognized by individuals from different cultural backgrounds than that from homogeneous cultures. Moreover, speakers of tonal languages demonstrated higher recognition accuracy compared to speakers of non-tonal languages. To further investigate the role of language tone in emotional prosody perception, Study 2 leveraged the diversity of Chinese dialects, which vary in the number of tones. A total of 223 participants fluent in dialects featuring 3 to 10 tones completed an emotional prosody recognition task and assessments of pitch, intensity, and duration sensitivity. The results showed that the number of dialect tones positively predicted emotion recognition accuracy, an effect fully mediated by sensitivity to intensity but not by pitch or duration. Collectively, these findings highlight the intertwined roles of culture and language in emotional prosody communication, underscoring the need to incorporate greater cultural and linguistic diversity in future research.

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Communication: **Discussion**

Parallel Session 4 : T2

Session	Parallel Session 1
Track	T1
Time	11:15 - 12:15
Type	Talks
Title	Emotional and Sensory Modality Shift Chair: Xia Fang

Communication: **Pan Zhihe - Emotion Communication in Speech Prosody: The Role of Culture and Language Tone**

Abstract: Despite decades of research, the influence of cultural and linguistic diversity on emotional prosody remains incompletely understood. The present work examined how historical heterogeneity and language tone shape emotional prosody recognition across two studies. In Study 1, a reanalysis of 46 studies spanning 43 cultures revealed that emotional prosody from historically heterogeneous cultures was more accurately recognized by individuals from different cultural backgrounds than that from homogeneous cultures. Moreover, speakers of tonal languages demonstrated higher recognition accuracy compared to speakers of non-tonal languages. To further investigate the role of language tone in emotional prosody perception, Study 2 leveraged the diversity of Chinese dialects, which vary in the number of tones. A total of 223 participants fluent in dialects featuring 3 to 10 tones completed an emotional prosody recognition task and assessments of pitch, intensity, and duration sensitivity. The results showed that the number of dialect tones positively predicted emotion recognition accuracy, an effect fully mediated by sensitivity to intensity but not by pitch or duration. Collectively, these findings highlight the intertwined roles of culture and language in emotional prosody communication, underscoring the need to incorporate greater cultural and linguistic diversity in future research.

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Communication: **Folyi Timea - Fine-grained affective experiences can occur spontaneously and involuntarily: Nine different types of affective feelings indirectly evoked by music**

Abstract: Do fine-grained affective experiences that go beyond broad affective dimensions (e.g., affective valence, arousal) or discrete emotions (e.g., happiness, sadness, fear) emerge as a result of reflective processing, or can they, despite their complexity, emerge as a result of “automatic” processing? The present study investigated whether complex and finely differentiated affective experiences evoked by music can arise spontaneously and involuntarily. Specifically, we focused on nine specific affective feelings that have been associated with music in self-report measures (e.g., feeling dreamy, serene, or heroic; Cowen et al., 2020), and we presented short (2000-2800 ms long) snippets of music that, according to self-report, predominantly evoke one of the nine feelings. Indirect processing conditions were realized in an affect misattribution procedure (e.g., Payne & Lundberg, 2014). In this task, the music snippets were presented as primes shortly before ambiguous targets, that is, abstract paintings that were previously rated as neutral in terms of valence and arousal. The task of the participants (N = 59) was to categorize the feeling evoked by the ambiguous pictures while ignoring the preceding primes. We calculated misattribution scores, which reflect biased responses towards the feeling associated with the task-irrelevant music. The results showed that the feelings associated with the music significantly biased the responses to the targets; significant misattribution effects emerged for all nine specific feelings. Responses in this procedure occurred when the music snippets were presented briefly and they were task-irrelevant. Thus, the music-induced affective experiences emerged spontaneously and under indirect processing conditions. Beyond the conceptualization of fine-grained affective experiences, our results may contribute to an understanding of the underlying processes of how such affective experiences might emerge. References Cowen, A. S., Fang, X., Sauter, D., & Keltner, D. (2020). What music makes us feel: At least 13 dimensions organize subjective experiences associated with music across different cultures. *Proceedings of the National Academy of Sciences*, 117(4), 1924–1934. <https://doi.org/10.1073/pnas.1910704117> Payne, K., & Lundberg, K. (2014). The Affect Misattribution Procedure: Ten Years of Evidence on Reliability, Validity, and Mechanisms: Affect Misattribution Procedure. *Social and Personality Psychology Compass*, 8(12), 672–686. <https://doi.org/10.1111/spc3.12148>

Communication: **Bell Meir Argaman - Social Context Shapes Facial Synchronization - A Virtual Reality Study**

Abstract: Facial synchronization is a key mechanism in social bonding, yet the role of social context remains underexplored. The current study employed a novel Virtual Reality (VR) paradigm to examine how relationship context (friends vs. strangers) influences facial activation and synchronization. By employing a controlled VR setting, this study overcomes key limitations of naturalistic paradigms, including reciprocal and task-driven synchronization effects. Participants (n= 107) were invited to a VR environment with a friend (n=52) or a stranger (n=55). They

were told that they were viewing the live facial expressions of their partner, while they are listening together to short audio clips. In reality, all participants were presented with identical pre-recorded avatar expressions, ensuring experimental control and eliminating reciprocal influences. Post-experiment, participants rated the avatars' realism, confirming they believed the avatars reflected their partner's expressions. Results show greater activation ($t(95) = 2.602$, $p = .011$) and synchronization ($t(103) = 2.76$, $p = 0.007$) of friends participants (vs strangers). Moreover, although enjoyment ratings did not differ significantly between groups, we found that the more participants were synched with the avatar, the more they enjoyed the audio clip ($t(105) = 4.277$, $p < .001$). These findings provide robust evidence that relationship context causally influences facial activation and synchronization. They further highlight the dynamic interplay between social context and non-verbal communication, offering insights with potential applications in social and clinical interventions.

Communication: **Discussion**

Parallel Session 4 : T3

Session	Parallel Session 1
Track	T1
Time	11:15 - 12:15
Type	Talks
Title	Emotional and Sensory Modality Shift Chair: Xia Fang

Communication: **Pan Zhihe - Emotion Communication in Speech Prosody: The Role of Culture and Language Tone**

Abstract: Despite decades of research, the influence of cultural and linguistic diversity on emotional prosody remains incompletely understood. The present work examined how historical heterogeneity and language tone shape emotional prosody recognition across two studies. In Study 1, a reanalysis of 46 studies spanning 43 cultures revealed that emotional prosody from historically heterogeneous cultures was more accurately recognized by individuals from different cultural backgrounds than that from homogeneous cultures. Moreover, speakers of tonal languages demonstrated higher recognition accuracy compared to speakers of non-tonal languages. To further investigate the role of language tone in emotional prosody perception, Study 2 leveraged the diversity of Chinese dialects, which vary in the number of tones. A total of 223 participants fluent in dialects featuring 3 to 10 tones completed an emotional prosody recognition task and assessments of pitch, intensity, and duration sensitivity. The results showed that the number of dialect tones positively predicted emotion recognition accuracy, an effect fully mediated by sensitivity to intensity but not by pitch or duration. Collectively, these findings highlight the intertwined roles of culture and language in emotional prosody communication, underscoring the need to incorporate greater cultural and linguistic diversity in future research.

Communication: **Fang Xia - Bimodal Emotion Decoding: When Faces and Voices Diverge**

Abstract: Emotions are conveyed through facial expressions and vocal tones, but how do observers perceive overall emotion when these channels conflict? This research systematically investigated how individuals decode emotions in three representative incongruent pairings: anger-happiness, happiness-sadness, and anger-sadness. Across six preregistered experiments (N = 359), both multidimensional ratings and open-ended responses were collected to enable a comprehensive and nuanced examination of how conflicting emotional cues are integrated. The results showed a robust facial dominance effect in anger-happiness pairings, with participants primarily relying on facial cues to interpret emotion. In contrast, vocal cues became more dominant in shaping the emotional perception in anger-sadness pairings. The happiness-sadness pairing displayed a more complex pattern, as participants either perceived an alternative emotion or a blend of emotions. To explain these patterns, we proposed and tested the emotion similarity hypothesis, which suggests that the morphological and acoustic

similarities between emotional expressions facilitate the integration of facial and vocal cues into a unified emotional perception. These findings provide valuable insights into how conflicting emotional cues are resolved and offer a refined framework for studying bimodal emotion perception across contexts.

Communication: **Folyi Timea - Fine-grained affective experiences can occur spontaneously and involuntarily: Nine different types of affective feelings indirectly evoked by music**

Abstract: Do fine-grained affective experiences that go beyond broad affective dimensions (e.g., affective valence, arousal) or discrete emotions (e.g., happiness, sadness, fear) emerge as a result of reflective processing, or can they, despite their complexity, emerge as a result of “automatic” processing? The present study investigated whether complex and finely differentiated affective experiences evoked by music can arise spontaneously and involuntarily. Specifically, we focused on nine specific affective feelings that have been associated with music in self-report measures (e.g., feeling dreamy, serene, or heroic; Cowen et al., 2020), and we presented short (2000-2800 ms long) snippets of music that, according to self-report, predominantly evoke one of the nine feelings. Indirect processing conditions were realized in an affect misattribution procedure (e.g., Payne & Lundberg, 2014). In this task, the music snippets were presented as primes shortly before ambiguous targets, that is, abstract paintings that were previously rated as neutral in terms of valence and arousal. The task of the participants (N = 59) was to categorize the feeling evoked by the ambiguous pictures while ignoring the preceding primes. We calculated misattribution scores, which reflect biased responses towards the feeling associated with the task-irrelevant music. The results showed that the feelings associated with the music significantly biased the responses to the targets; significant misattribution effects emerged for all nine specific feelings. Responses in this procedure occurred when the music snippets were presented briefly and they were task-irrelevant. Thus, the music-induced affective experiences emerged spontaneously and under indirect processing conditions. Beyond the conceptualization of fine-grained affective experiences, our results may contribute to an understanding of the underlying processes of how such affective experiences might emerge. References Cowen, A. S., Fang, X., Sauter, D., & Keltner, D. (2020). What music makes us feel: At least 13 dimensions organize subjective experiences associated with music across different cultures. *Proceedings of the National Academy of Sciences*, 117(4), 1924–1934. <https://doi.org/10.1073/pnas.1910704117> Payne, K., & Lundberg, K. (2014). The Affect Misattribution Procedure: Ten Years of Evidence on Reliability, Validity, and Mechanisms: Affect Misattribution Procedure. *Social and Personality Psychology Compass*, 8(12), 672–686. <https://doi.org/10.1111/spc3.12148>

Communication: **Bell Meir Argaman - Social Context Shapes Facial Synchronization - A Virtual Reality Study**

Abstract: Facial synchronization is a key mechanism in social bonding, yet the role of social context remains underexplored. The current study employed a novel Virtual Reality (VR) paradigm to examine how relationship context (friends vs. strangers) influences facial activation and synchronization. By employing a controlled VR setting, this study overcomes key limitations of naturalistic paradigms, including reciprocal and task-driven synchronization effects. Participants (n= 107) were invited to a VR environment with a friend (n=52) or a stranger (n=55). They

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Communication: **Discussion**

Parallel Session 4 : T4

Session	Parallel Session 1
Track	T1
Time	11:15 - 12:15
Type	Talks
Title	Emotional and Sensory Modality Shift Chair: Xia Fang

Communication: **Pan Zhihe - Emotion Communication in Speech Prosody: The Role of Culture and Language Tone**

Abstract: Despite decades of research, the influence of cultural and linguistic diversity on emotional prosody remains incompletely understood. The present work examined how historical heterogeneity and language tone shape emotional prosody recognition across two studies. In Study 1, a reanalysis of 46 studies spanning 43 cultures revealed that emotional prosody from historically heterogeneous cultures was more accurately recognized by individuals from different cultural backgrounds than that from homogeneous cultures. Moreover, speakers of tonal languages demonstrated higher recognition accuracy compared to speakers of non-tonal languages. To further investigate the role of language tone in emotional prosody perception, Study 2 leveraged the diversity of Chinese dialects, which vary in the number of tones. A total of 223 participants fluent in dialects featuring 3 to 10 tones completed an emotional prosody recognition task and assessments of pitch, intensity, and duration sensitivity. The results showed that the number of dialect tones positively predicted emotion recognition accuracy, an effect fully mediated by sensitivity to intensity but not by pitch or duration. Collectively, these findings highlight the intertwined roles of culture and language in emotional prosody communication, underscoring the need to incorporate greater cultural and linguistic diversity in future research.

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Abstract: Emotions are conveyed through facial expressions and vocal tones, but how do observers perceive overall emotion when these channels conflict? This research systematically investigated how individuals decode emotions in three representative incongruent pairings: anger-happiness, happiness-sadness, and anger-sadness. Across six preregistered experiments (N = 359), both multidimensional ratings and open-ended responses were collected to enable a comprehensive and nuanced examination of how conflicting emotional cues are integrated. The results showed a robust facial dominance effect in anger-happiness pairings, with participants primarily relying on facial cues to interpret emotion. In contrast, vocal cues became more dominant in shaping the emotional perception in anger-sadness pairings. The happiness-sadness pairing displayed a more complex pattern, as participants either perceived an alternative emotion or a blend of emotions. To explain these patterns, we proposed and tested the emotion similarity hypothesis, which suggests that the morphological and acoustic

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Communication: **Folyi Timea - Fine-grained affective experiences can occur spontaneously and involuntarily: Nine different types of affective feelings indirectly evoked by music**

Abstract: Do fine-grained affective experiences that go beyond broad affective dimensions (e.g., affective valence, arousal) or discrete emotions (e.g., happiness, sadness, fear) emerge as a result of reflective processing, or can they, despite their complexity, emerge as a result of “automatic” processing? The present study investigated whether complex and finely differentiated affective experiences evoked by music can arise spontaneously and involuntarily. Specifically, we focused on nine specific affective feelings that have been associated with music in self-report measures (e.g., feeling dreamy, serene, or heroic; Cowen et al., 2020), and we presented short (2000-2800 ms long) snippets of music that, according to self-report, predominantly evoke one of the nine feelings. Indirect processing conditions were realized in an affect misattribution procedure (e.g., Payne & Lundberg, 2014). In this task, the music snippets were presented as primes shortly before ambiguous targets, that is, abstract paintings that were previously rated as neutral in terms of valence and arousal. The task of the participants (N = 59) was to categorize the feeling evoked by the ambiguous pictures while ignoring the preceding primes. We calculated misattribution scores, which reflect biased responses towards the feeling associated with the task-irrelevant music. The results showed that the feelings associated with the music significantly biased the responses to the targets; significant misattribution effects emerged for all nine specific feelings. Responses in this procedure occurred when the music snippets were presented briefly and they were task-irrelevant. Thus, the music-induced affective experiences emerged spontaneously and under indirect processing conditions. Beyond the conceptualization of fine-grained affective experiences, our results may contribute to an understanding of the underlying processes of how such affective experiences might emerge. References Cowen, A. S., Fang, X., Sauter, D., & Keltner, D. (2020). What music makes us feel: At least 13 dimensions organize subjective experiences associated with music across different cultures. *Proceedings of the National Academy of Sciences*, 117(4), 1924–1934. <https://doi.org/10.1073/pnas.1910704117> Payne, K., & Lundberg, K. (2014). The Affect Misattribution Procedure: Ten Years of Evidence on Reliability, Validity, and Mechanisms: Affect Misattribution Procedure. *Social and Personality Psychology Compass*, 8(12), 672–686. <https://doi.org/10.1111/spc3.12148>

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Communication: **Discussion**

Parallel Session 4 : T5

Session	Parallel Session 1
Track	T1
Time	11:15 - 12:15
Type	Talks
Title	Emotional and Sensory Modality Shift Chair: Xia Fang

Communication: **Pan Zhihe - Emotion Communication in Speech Prosody: The Role of Culture and Language Tone**

Abstract: Despite decades of research, the influence of cultural and linguistic diversity on emotional prosody remains incompletely understood. The present work examined how historical heterogeneity and language tone shape emotional prosody recognition across two studies. In Study 1, a reanalysis of 46 studies spanning 43 cultures revealed that emotional prosody from historically heterogeneous cultures was more accurately recognized by individuals from different cultural backgrounds than that from homogeneous cultures. Moreover, speakers of tonal languages demonstrated higher recognition accuracy compared to speakers of non-tonal languages. To further investigate the role of language tone in emotional prosody perception, Study 2 leveraged the diversity of Chinese dialects, which vary in the number of tones. A total of 223 participants fluent in dialects featuring 3 to 10 tones completed an emotional prosody recognition task and assessments of pitch, intensity, and duration sensitivity. The results showed that the number of dialect tones positively predicted emotion recognition accuracy, an effect fully mediated by sensitivity to intensity but not by pitch or duration. Collectively, these findings highlight the intertwined roles of culture and language in emotional prosody communication, underscoring the need to incorporate greater cultural and linguistic diversity in future research.

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Communication: **Discussion**

Parallel Session 5 : T1

Session	Parallel Session 1
Track	T1
Time	11:15 - 12:15
Type	Talks
Title	Emotional and Sensory Modality Shift Chair: Xia Fang

Communication: **Pan Zhihe - Emotion Communication in Speech Prosody: The Role of Culture and Language Tone**

Abstract: Despite decades of research, the influence of cultural and linguistic diversity on emotional prosody remains incompletely understood. The present work examined how historical heterogeneity and language tone shape emotional prosody recognition across two studies. In Study 1, a reanalysis of 46 studies spanning 43 cultures revealed that emotional prosody from historically heterogeneous cultures was more accurately recognized by individuals from different cultural backgrounds than that from homogeneous cultures. Moreover, speakers of tonal languages demonstrated higher recognition accuracy compared to speakers of non-tonal languages. To further investigate the role of language tone in emotional prosody perception, Study 2 leveraged the diversity of Chinese dialects, which vary in the number of tones. A total of 223 participants fluent in dialects featuring 3 to 10 tones completed an emotional prosody recognition task and assessments of pitch, intensity, and duration sensitivity. The results showed that the number of dialect tones positively predicted emotion recognition accuracy, an effect fully mediated by sensitivity to intensity but not by pitch or duration. Collectively, these findings highlight the intertwined roles of culture and language in emotional prosody communication, underscoring the need to incorporate greater cultural and linguistic diversity in future research.

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Communication: **Discussion**

Parallel Session 5 : T2

Session	Parallel Session 1
Track	T1
Time	11:15 - 12:15
Type	Talks
Title	Emotional and Sensory Modality Shift Chair: Xia Fang

Communication: **Pan Zhihe - Emotion Communication in Speech Prosody: The Role of Culture and Language Tone**

Abstract: Despite decades of research, the influence of cultural and linguistic diversity on emotional prosody remains incompletely understood. The present work examined how historical heterogeneity and language tone shape emotional prosody recognition across two studies. In Study 1, a reanalysis of 46 studies spanning 43 cultures revealed that emotional prosody from historically heterogeneous cultures was more accurately recognized by individuals from different cultural backgrounds than that from homogeneous cultures. Moreover, speakers of tonal languages demonstrated higher recognition accuracy compared to speakers of non-tonal languages. To further investigate the role of language tone in emotional prosody perception, Study 2 leveraged the diversity of Chinese dialects, which vary in the number of tones. A total of 223 participants fluent in dialects featuring 3 to 10 tones completed an emotional prosody recognition task and assessments of pitch, intensity, and duration sensitivity. The results showed that the number of dialect tones positively predicted emotion recognition accuracy, an effect fully mediated by sensitivity to intensity but not by pitch or duration. Collectively, these findings highlight the intertwined roles of culture and language in emotional prosody communication, underscoring the need to incorporate greater cultural and linguistic diversity in future research.

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Communication: **Folyi Timea - Fine-grained affective experiences can occur spontaneously and involuntarily: Nine different types of affective feelings indirectly evoked by music**

Abstract: Do fine-grained affective experiences that go beyond broad affective dimensions (e.g., affective valence, arousal) or discrete emotions (e.g., happiness, sadness, fear) emerge as a result of reflective processing, or can they, despite their complexity, emerge as a result of “automatic” processing? The present study investigated whether complex and finely differentiated affective experiences evoked by music can arise spontaneously and involuntarily. Specifically, we focused on nine specific affective feelings that have been associated with music in self-report measures (e.g., feeling dreamy, serene, or heroic; Cowen et al., 2020), and we presented short (2000-2800 ms long) snippets of music that, according to self-report, predominantly evoke one of the nine feelings. Indirect processing conditions were realized in an affect misattribution procedure (e.g., Payne & Lundberg, 2014). In this task, the music snippets were presented as primes shortly before ambiguous targets, that is, abstract paintings that were previously rated as neutral in terms of valence and arousal. The task of the participants (N = 59) was to categorize the feeling evoked by the ambiguous pictures while ignoring the preceding primes. We calculated misattribution scores, which reflect biased responses towards the feeling associated with the task-irrelevant music. The results showed that the feelings associated with the music significantly biased the responses to the targets; significant misattribution effects emerged for all nine specific feelings. Responses in this procedure occurred when the music snippets were presented briefly and they were task-irrelevant. Thus, the music-induced affective experiences emerged spontaneously and under indirect processing conditions. Beyond the conceptualization of fine-grained affective experiences, our results may contribute to an understanding of the underlying processes of how such affective experiences might emerge. References Cowen, A. S., Fang, X., Sauter, D., & Keltner, D. (2020). What music makes us feel: At least 13 dimensions organize subjective experiences associated with music across different cultures. *Proceedings of the National Academy of Sciences*, 117(4), 1924–1934. <https://doi.org/10.1073/pnas.1910704117> Payne, K., & Lundberg, K. (2014). The Affect Misattribution Procedure: Ten Years of Evidence on Reliability, Validity, and Mechanisms: Affect Misattribution Procedure. *Social and Personality Psychology Compass*, 8(12), 672–686. <https://doi.org/10.1111/spc3.12148>

Communication: **Bell Meir Argaman - Social Context Shapes Facial Synchronization - A Virtual Reality Study**

Abstract: Facial synchronization is a key mechanism in social bonding, yet the role of social context remains underexplored. The current study employed a novel Virtual Reality (VR) paradigm to examine how relationship context (friends vs. strangers) influences facial activation and synchronization. By employing a controlled VR setting, this study overcomes key limitations of naturalistic paradigms, including reciprocal and task-driven synchronization effects. Participants (n= 107) were invited to a VR environment with a friend (n=52) or a stranger (n=55). They

were told that they were viewing the live facial expressions of their partner, while they are listening together to short audio clips. In reality, all participants were presented with identical pre-recorded avatar expressions, ensuring experimental control and eliminating reciprocal influences. Post-experiment, participants rated the avatars' realism, confirming they believed the avatars reflected their partner's expressions. Results show greater activation ($t(95) = 2.602$, $p = .011$) and synchronization ($t(103) = 2.76$, $p = 0.007$) of friends participants (vs strangers). Moreover, although enjoyment ratings did not differ significantly between groups, we found that the more participants were synched with the avatar, the more they enjoyed the audio clip ($t(105) = 4.277$, $p < .001$). These findings provide robust evidence that relationship context causally influences facial activation and synchronization. They further highlight the dynamic interplay between social context and non-verbal communication, offering insights with potential applications in social and clinical interventions.

Communication: **Discussion**

Parallel Session 5 : T3

Session	Parallel Session 1
Track	T1
Time	11:15 - 12:15
Type	Talks
Title	Emotional and Sensory Modality Shift Chair: Xia Fang

Communication: **Pan Zhihe - Emotion Communication in Speech Prosody: The Role of Culture and Language Tone**

Abstract: Despite decades of research, the influence of cultural and linguistic diversity on emotional prosody remains incompletely understood. The present work examined how historical heterogeneity and language tone shape emotional prosody recognition across two studies. In Study 1, a reanalysis of 46 studies spanning 43 cultures revealed that emotional prosody from historically heterogeneous cultures was more accurately recognized by individuals from different cultural backgrounds than that from homogeneous cultures. Moreover, speakers of tonal languages demonstrated higher recognition accuracy compared to speakers of non-tonal languages. To further investigate the role of language tone in emotional prosody perception, Study 2 leveraged the diversity of Chinese dialects, which vary in the number of tones. A total of 223 participants fluent in dialects featuring 3 to 10 tones completed an emotional prosody recognition task and assessments of pitch, intensity, and duration sensitivity. The results showed that the number of dialect tones positively predicted emotion recognition accuracy, an effect fully mediated by sensitivity to intensity but not by pitch or duration. Collectively, these findings highlight the intertwined roles of culture and language in emotional prosody communication, underscoring the need to incorporate greater cultural and linguistic diversity in future research.

Communication: **Fang Xia - Bimodal Emotion Decoding: When Faces and Voices Diverge**

Abstract: Emotions are conveyed through facial expressions and vocal tones, but how do observers perceive overall emotion when these channels conflict? This research systematically investigated how individuals decode emotions in three representative incongruent pairings: anger-happiness, happiness-sadness, and anger-sadness. Across six preregistered experiments (N = 359), both multidimensional ratings and open-ended responses were collected to enable a comprehensive and nuanced examination of how conflicting emotional cues are integrated. The results showed a robust facial dominance effect in anger-happiness pairings, with participants primarily relying on facial cues to interpret emotion. In contrast, vocal cues became more dominant in shaping the emotional perception in anger-sadness pairings. The happiness-sadness pairing displayed a more complex pattern, as participants either perceived an alternative emotion or a blend of emotions. To explain these patterns, we proposed and tested the emotion similarity hypothesis, which suggests that the morphological and acoustic

similarities between emotional expressions facilitate the integration of facial and vocal cues into a unified emotional perception. These findings provide valuable insights into how conflicting emotional cues are resolved and offer a refined framework for studying bimodal emotion perception across contexts.

Communication: **Folyi Timea - Fine-grained affective experiences can occur spontaneously and involuntarily: Nine different types of affective feelings indirectly evoked by music**

Abstract: Do fine-grained affective experiences that go beyond broad affective dimensions (e.g., affective valence, arousal) or discrete emotions (e.g., happiness, sadness, fear) emerge as a result of reflective processing, or can they, despite their complexity, emerge as a result of “automatic” processing? The present study investigated whether complex and finely differentiated affective experiences evoked by music can arise spontaneously and involuntarily. Specifically, we focused on nine specific affective feelings that have been associated with music in self-report measures (e.g., feeling dreamy, serene, or heroic; Cowen et al., 2020), and we presented short (2000-2800 ms long) snippets of music that, according to self-report, predominantly evoke one of the nine feelings. Indirect processing conditions were realized in an affect misattribution procedure (e.g., Payne & Lundberg, 2014). In this task, the music snippets were presented as primes shortly before ambiguous targets, that is, abstract paintings that were previously rated as neutral in terms of valence and arousal. The task of the participants (N = 59) was to categorize the feeling evoked by the ambiguous pictures while ignoring the preceding primes. We calculated misattribution scores, which reflect biased responses towards the feeling associated with the task-irrelevant music. The results showed that the feelings associated with the music significantly biased the responses to the targets; significant misattribution effects emerged for all nine specific feelings. Responses in this procedure occurred when the music snippets were presented briefly and they were task-irrelevant. Thus, the music-induced affective experiences emerged spontaneously and under indirect processing conditions. Beyond the conceptualization of fine-grained affective experiences, our results may contribute to an understanding of the underlying processes of how such affective experiences might emerge. References Cowen, A. S., Fang, X., Sauter, D., & Keltner, D. (2020). What music makes us feel: At least 13 dimensions organize subjective experiences associated with music across different cultures. *Proceedings of the National Academy of Sciences*, 117(4), 1924–1934. <https://doi.org/10.1073/pnas.1910704117> Payne, K., & Lundberg, K. (2014). The Affect Misattribution Procedure: Ten Years of Evidence on Reliability, Validity, and Mechanisms: Affect Misattribution Procedure. *Social and Personality Psychology Compass*, 8(12), 672–686. <https://doi.org/10.1111/spc3.12148>

Communication: **Bell Meir Argaman - Social Context Shapes Facial Synchronization - A Virtual Reality Study**

Abstract: Facial synchronization is a key mechanism in social bonding, yet the role of social context remains underexplored. The current study employed a novel Virtual Reality (VR) paradigm to examine how relationship context (friends vs. strangers) influences facial activation and synchronization. By employing a controlled VR setting, this study overcomes key limitations of naturalistic paradigms, including reciprocal and task-driven synchronization effects. Participants (n= 107) were invited to a VR environment with a friend (n=52) or a stranger (n=55). They

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Communication: **Discussion**

Parallel Session 5 : T4

Session	Parallel Session 1
Track	T1
Time	11:15 - 12:15
Type	Talks
Title	Emotional and Sensory Modality Shift Chair: Xia Fang

Communication: **Pan Zhihe - Emotion Communication in Speech Prosody: The Role of Culture and Language Tone**

Abstract: Despite decades of research, the influence of cultural and linguistic diversity on emotional prosody remains incompletely understood. The present work examined how historical heterogeneity and language tone shape emotional prosody recognition across two studies. In Study 1, a reanalysis of 46 studies spanning 43 cultures revealed that emotional prosody from historically heterogeneous cultures was more accurately recognized by individuals from different cultural backgrounds than that from homogeneous cultures. Moreover, speakers of tonal languages demonstrated higher recognition accuracy compared to speakers of non-tonal languages. To further investigate the role of language tone in emotional prosody perception, Study 2 leveraged the diversity of Chinese dialects, which vary in the number of tones. A total of 223 participants fluent in dialects featuring 3 to 10 tones completed an emotional prosody recognition task and assessments of pitch, intensity, and duration sensitivity. The results showed that the number of dialect tones positively predicted emotion recognition accuracy, an effect fully mediated by sensitivity to intensity but not by pitch or duration. Collectively, these findings highlight the intertwined roles of culture and language in emotional prosody communication, underscoring the need to incorporate greater cultural and linguistic diversity in future research.

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Abstract: Emotions are conveyed through facial expressions and vocal tones, but how do observers perceive overall emotion when these channels conflict? This research systematically investigated how individuals decode emotions in three representative incongruent pairings: anger-happiness, happiness-sadness, and anger-sadness. Across six preregistered experiments (N = 359), both multidimensional ratings and open-ended responses were collected to enable a comprehensive and nuanced examination of how conflicting emotional cues are integrated. The results showed a robust facial dominance effect in anger-happiness pairings, with participants primarily relying on facial cues to interpret emotion. In contrast, vocal cues became more dominant in shaping the emotional perception in anger-sadness pairings. The happiness-sadness pairing displayed a more complex pattern, as participants either perceived an alternative emotion or a blend of emotions. To explain these patterns, we proposed and tested the emotion similarity hypothesis, which suggests that the morphological and acoustic

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Communication: **Folyi Timea - Fine-grained affective experiences can occur spontaneously and involuntarily: Nine different types of affective feelings indirectly evoked by music**

Abstract: Do fine-grained affective experiences that go beyond broad affective dimensions (e.g., affective valence, arousal) or discrete emotions (e.g., happiness, sadness, fear) emerge as a result of reflective processing, or can they, despite their complexity, emerge as a result of “automatic” processing? The present study investigated whether complex and finely differentiated affective experiences evoked by music can arise spontaneously and involuntarily. Specifically, we focused on nine specific affective feelings that have been associated with music in self-report measures (e.g., feeling dreamy, serene, or heroic; Cowen et al., 2020), and we presented short (2000-2800 ms long) snippets of music that, according to self-report, predominantly evoke one of the nine feelings. Indirect processing conditions were realized in an affect misattribution procedure (e.g., Payne & Lundberg, 2014). In this task, the music snippets were presented as primes shortly before ambiguous targets, that is, abstract paintings that were previously rated as neutral in terms of valence and arousal. The task of the participants (N = 59) was to categorize the feeling evoked by the ambiguous pictures while ignoring the preceding primes. We calculated misattribution scores, which reflect biased responses towards the feeling associated with the task-irrelevant music. The results showed that the feelings associated with the music significantly biased the responses to the targets; significant misattribution effects emerged for all nine specific feelings. Responses in this procedure occurred when the music snippets were presented briefly and they were task-irrelevant. Thus, the music-induced affective experiences emerged spontaneously and under indirect processing conditions. Beyond the conceptualization of fine-grained affective experiences, our results may contribute to an understanding of the underlying processes of how such affective experiences might emerge. References Cowen, A. S., Fang, X., Sauter, D., & Keltner, D. (2020). What music makes us feel: At least 13 dimensions organize subjective experiences associated with music across different cultures. *Proceedings of the National Academy of Sciences*, 117(4), 1924–1934. <https://doi.org/10.1073/pnas.1910704117> Payne, K., & Lundberg, K. (2014). The Affect Misattribution Procedure: Ten Years of Evidence on Reliability, Validity, and Mechanisms: Affect Misattribution Procedure. *Social and Personality Psychology Compass*, 8(12), 672–686. <https://doi.org/10.1111/spc3.12148>

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Communication: **Discussion**

Parallel Session 5 : T5

Session	Parallel Session 1
Track	T1
Time	11:15 - 12:15
Type	Talks
Title	Emotional and Sensory Modality Shift Chair: Xia Fang

Communication: **Pan Zhihe - Emotion Communication in Speech Prosody: The Role of Culture and Language Tone**

Abstract: Despite decades of research, the influence of cultural and linguistic diversity on emotional prosody remains incompletely understood. The present work examined how historical heterogeneity and language tone shape emotional prosody recognition across two studies. In Study 1, a reanalysis of 46 studies spanning 43 cultures revealed that emotional prosody from historically heterogeneous cultures was more accurately recognized by individuals from different cultural backgrounds than that from homogeneous cultures. Moreover, speakers of tonal languages demonstrated higher recognition accuracy compared to speakers of non-tonal languages. To further investigate the role of language tone in emotional prosody perception, Study 2 leveraged the diversity of Chinese dialects, which vary in the number of tones. A total of 223 participants fluent in dialects featuring 3 to 10 tones completed an emotional prosody recognition task and assessments of pitch, intensity, and duration sensitivity. The results showed that the number of dialect tones positively predicted emotion recognition accuracy, an effect fully mediated by sensitivity to intensity but not by pitch or duration. Collectively, these findings highlight the intertwined roles of culture and language in emotional prosody communication, underscoring the need to incorporate greater cultural and linguistic diversity in future research.

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Communication: **Discussion**

Parallel Session 6 : T1

Session	Parallel Session 1
Track	T1
Time	11:15 - 12:15
Type	Talks
Title	Emotional and Sensory Modality Shift Chair: Xia Fang

Communication: **Pan Zhihe - Emotion Communication in Speech Prosody: The Role of Culture and Language Tone**

Abstract: Despite decades of research, the influence of cultural and linguistic diversity on emotional prosody remains incompletely understood. The present work examined how historical heterogeneity and language tone shape emotional prosody recognition across two studies. In Study 1, a reanalysis of 46 studies spanning 43 cultures revealed that emotional prosody from historically heterogeneous cultures was more accurately recognized by individuals from different cultural backgrounds than that from homogeneous cultures. Moreover, speakers of tonal languages demonstrated higher recognition accuracy compared to speakers of non-tonal languages. To further investigate the role of language tone in emotional prosody perception, Study 2 leveraged the diversity of Chinese dialects, which vary in the number of tones. A total of 223 participants fluent in dialects featuring 3 to 10 tones completed an emotional prosody recognition task and assessments of pitch, intensity, and duration sensitivity. The results showed that the number of dialect tones positively predicted emotion recognition accuracy, an effect fully mediated by sensitivity to intensity but not by pitch or duration. Collectively, these findings highlight the intertwined roles of culture and language in emotional prosody communication, underscoring the need to incorporate greater cultural and linguistic diversity in future research.

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Communication: **Discussion**

Parallel Session 6 : T2

Session	Parallel Session 1
Track	T1
Time	11:15 - 12:15
Type	Talks
Title	Emotional and Sensory Modality Shift Chair: Xia Fang

Communication: **Pan Zhihe - Emotion Communication in Speech Prosody: The Role of Culture and Language Tone**

Abstract: Despite decades of research, the influence of cultural and linguistic diversity on emotional prosody remains incompletely understood. The present work examined how historical heterogeneity and language tone shape emotional prosody recognition across two studies. In Study 1, a reanalysis of 46 studies spanning 43 cultures revealed that emotional prosody from historically heterogeneous cultures was more accurately recognized by individuals from different cultural backgrounds than that from homogeneous cultures. Moreover, speakers of tonal languages demonstrated higher recognition accuracy compared to speakers of non-tonal languages. To further investigate the role of language tone in emotional prosody perception, Study 2 leveraged the diversity of Chinese dialects, which vary in the number of tones. A total of 223 participants fluent in dialects featuring 3 to 10 tones completed an emotional prosody recognition task and assessments of pitch, intensity, and duration sensitivity. The results showed that the number of dialect tones positively predicted emotion recognition accuracy, an effect fully mediated by sensitivity to intensity but not by pitch or duration. Collectively, these findings highlight the intertwined roles of culture and language in emotional prosody communication, underscoring the need to incorporate greater cultural and linguistic diversity in future research.

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Communication: **Folyi Timea - Fine-grained affective experiences can occur spontaneously and involuntarily: Nine different types of affective feelings indirectly evoked by music**

Abstract: Do fine-grained affective experiences that go beyond broad affective dimensions (e.g., affective valence, arousal) or discrete emotions (e.g., happiness, sadness, fear) emerge as a result of reflective processing, or can they, despite their complexity, emerge as a result of “automatic” processing? The present study investigated whether complex and finely differentiated affective experiences evoked by music can arise spontaneously and involuntarily. Specifically, we focused on nine specific affective feelings that have been associated with music in self-report measures (e.g., feeling dreamy, serene, or heroic; Cowen et al., 2020), and we presented short (2000-2800 ms long) snippets of music that, according to self-report, predominantly evoke one of the nine feelings. Indirect processing conditions were realized in an affect misattribution procedure (e.g., Payne & Lundberg, 2014). In this task, the music snippets were presented as primes shortly before ambiguous targets, that is, abstract paintings that were previously rated as neutral in terms of valence and arousal. The task of the participants (N = 59) was to categorize the feeling evoked by the ambiguous pictures while ignoring the preceding primes. We calculated misattribution scores, which reflect biased responses towards the feeling associated with the task-irrelevant music. The results showed that the feelings associated with the music significantly biased the responses to the targets; significant misattribution effects emerged for all nine specific feelings. Responses in this procedure occurred when the music snippets were presented briefly and they were task-irrelevant. Thus, the music-induced affective experiences emerged spontaneously and under indirect processing conditions. Beyond the conceptualization of fine-grained affective experiences, our results may contribute to an understanding of the underlying processes of how such affective experiences might emerge. References Cowen, A. S., Fang, X., Sauter, D., & Keltner, D. (2020). What music makes us feel: At least 13 dimensions organize subjective experiences associated with music across different cultures. *Proceedings of the National Academy of Sciences*, 117(4), 1924–1934. <https://doi.org/10.1073/pnas.1910704117> Payne, K., & Lundberg, K. (2014). The Affect Misattribution Procedure: Ten Years of Evidence on Reliability, Validity, and Mechanisms: Affect Misattribution Procedure. *Social and Personality Psychology Compass*, 8(12), 672–686. <https://doi.org/10.1111/spc3.12148>

Communication: **Bell Meir Argaman - Social Context Shapes Facial Synchronization - A Virtual Reality Study**

Abstract: Facial synchronization is a key mechanism in social bonding, yet the role of social context remains underexplored. The current study employed a novel Virtual Reality (VR) paradigm to examine how relationship context (friends vs. strangers) influences facial activation and synchronization. By employing a controlled VR setting, this study overcomes key limitations of naturalistic paradigms, including reciprocal and task-driven synchronization effects. Participants (n= 107) were invited to a VR environment with a friend (n=52) or a stranger (n=55). They

were told that they were viewing the live facial expressions of their partner, while they are listening together to short audio clips. In reality, all participants were presented with identical pre-recorded avatar expressions, ensuring experimental control and eliminating reciprocal influences. Post-experiment, participants rated the avatars' realism, confirming they believed the avatars reflected their partner's expressions. Results show greater activation ($t(95) = 2.602$, $p = .011$) and synchronization ($t(103) = 2.76$, $p = 0.007$) of friends participants (vs strangers). Moreover, although enjoyment ratings did not differ significantly between groups, we found that the more participants were synched with the avatar, the more they enjoyed the audio clip ($t(105) = 4.277$, $p < .001$). These findings provide robust evidence that relationship context causally influences facial activation and synchronization. They further highlight the dynamic interplay between social context and non-verbal communication, offering insights with potential applications in social and clinical interventions.

Communication: **Discussion**

Parallel Session 6 : T3

Session	Parallel Session 1
Track	T1
Time	11:15 - 12:15
Type	Talks
Title	Emotional and Sensory Modality Shift Chair: Xia Fang

Communication: **Pan Zhihe - Emotion Communication in Speech Prosody: The Role of Culture and Language Tone**

Abstract: Despite decades of research, the influence of cultural and linguistic diversity on emotional prosody remains incompletely understood. The present work examined how historical heterogeneity and language tone shape emotional prosody recognition across two studies. In Study 1, a reanalysis of 46 studies spanning 43 cultures revealed that emotional prosody from historically heterogeneous cultures was more accurately recognized by individuals from different cultural backgrounds than that from homogeneous cultures. Moreover, speakers of tonal languages demonstrated higher recognition accuracy compared to speakers of non-tonal languages. To further investigate the role of language tone in emotional prosody perception, Study 2 leveraged the diversity of Chinese dialects, which vary in the number of tones. A total of 223 participants fluent in dialects featuring 3 to 10 tones completed an emotional prosody recognition task and assessments of pitch, intensity, and duration sensitivity. The results showed that the number of dialect tones positively predicted emotion recognition accuracy, an effect fully mediated by sensitivity to intensity but not by pitch or duration. Collectively, these findings highlight the intertwined roles of culture and language in emotional prosody communication, underscoring the need to incorporate greater cultural and linguistic diversity in future research.

Communication: **Fang Xia - Bimodal Emotion Decoding: When Faces and Voices Diverge**

Abstract: Emotions are conveyed through facial expressions and vocal tones, but how do observers perceive overall emotion when these channels conflict? This research systematically investigated how individuals decode emotions in three representative incongruent pairings: anger-happiness, happiness-sadness, and anger-sadness. Across six preregistered experiments (N = 359), both multidimensional ratings and open-ended responses were collected to enable a comprehensive and nuanced examination of how conflicting emotional cues are integrated. The results showed a robust facial dominance effect in anger-happiness pairings, with participants primarily relying on facial cues to interpret emotion. In contrast, vocal cues became more dominant in shaping the emotional perception in anger-sadness pairings. The happiness-sadness pairing displayed a more complex pattern, as participants either perceived an alternative emotion or a blend of emotions. To explain these patterns, we proposed and tested the emotion similarity hypothesis, which suggests that the morphological and acoustic

similarities between emotional expressions facilitate the integration of facial and vocal cues into a unified emotional perception. These findings provide valuable insights into how conflicting emotional cues are resolved and offer a refined framework for studying bimodal emotion perception across contexts.

Communication: **Folyi Timea - Fine-grained affective experiences can occur spontaneously and involuntarily: Nine different types of affective feelings indirectly evoked by music**

Abstract: Do fine-grained affective experiences that go beyond broad affective dimensions (e.g., affective valence, arousal) or discrete emotions (e.g., happiness, sadness, fear) emerge as a result of reflective processing, or can they, despite their complexity, emerge as a result of “automatic” processing? The present study investigated whether complex and finely differentiated affective experiences evoked by music can arise spontaneously and involuntarily. Specifically, we focused on nine specific affective feelings that have been associated with music in self-report measures (e.g., feeling dreamy, serene, or heroic; Cowen et al., 2020), and we presented short (2000-2800 ms long) snippets of music that, according to self-report, predominantly evoke one of the nine feelings. Indirect processing conditions were realized in an affect misattribution procedure (e.g., Payne & Lundberg, 2014). In this task, the music snippets were presented as primes shortly before ambiguous targets, that is, abstract paintings that were previously rated as neutral in terms of valence and arousal. The task of the participants (N = 59) was to categorize the feeling evoked by the ambiguous pictures while ignoring the preceding primes. We calculated misattribution scores, which reflect biased responses towards the feeling associated with the task-irrelevant music. The results showed that the feelings associated with the music significantly biased the responses to the targets; significant misattribution effects emerged for all nine specific feelings. Responses in this procedure occurred when the music snippets were presented briefly and they were task-irrelevant. Thus, the music-induced affective experiences emerged spontaneously and under indirect processing conditions. Beyond the conceptualization of fine-grained affective experiences, our results may contribute to an understanding of the underlying processes of how such affective experiences might emerge. References Cowen, A. S., Fang, X., Sauter, D., & Keltner, D. (2020). What music makes us feel: At least 13 dimensions organize subjective experiences associated with music across different cultures. *Proceedings of the National Academy of Sciences*, 117(4), 1924–1934. <https://doi.org/10.1073/pnas.1910704117> Payne, K., & Lundberg, K. (2014). The Affect Misattribution Procedure: Ten Years of Evidence on Reliability, Validity, and Mechanisms: Affect Misattribution Procedure. *Social and Personality Psychology Compass*, 8(12), 672–686. <https://doi.org/10.1111/spc3.12148>

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Abstract: Facial synchronization is a key mechanism in social bonding, yet the role of social context remains underexplored. The current study employed a novel Virtual Reality (VR) paradigm to examine how relationship context (friends vs. strangers) influences facial activation and synchronization. By employing a controlled VR setting, this study overcomes key limitations of naturalistic paradigms, including reciprocal and task-driven synchronization effects. Participants (n= 107) were invited to a VR environment with a friend (n=52) or a stranger (n=55). They

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Communication: **Discussion**

Parallel Session 6 : T4

Session	Parallel Session 1
Track	T1
Time	11:15 - 12:15
Type	Talks
Title	Emotional and Sensory Modality Shift Chair: Xia Fang

Communication: **Pan Zhihe - Emotion Communication in Speech Prosody: The Role of Culture and Language Tone**

Abstract: Despite decades of research, the influence of cultural and linguistic diversity on emotional prosody remains incompletely understood. The present work examined how historical heterogeneity and language tone shape emotional prosody recognition across two studies. In Study 1, a reanalysis of 46 studies spanning 43 cultures revealed that emotional prosody from historically heterogeneous cultures was more accurately recognized by individuals from different cultural backgrounds than that from homogeneous cultures. Moreover, speakers of tonal languages demonstrated higher recognition accuracy compared to speakers of non-tonal languages. To further investigate the role of language tone in emotional prosody perception, Study 2 leveraged the diversity of Chinese dialects, which vary in the number of tones. A total of 223 participants fluent in dialects featuring 3 to 10 tones completed an emotional prosody recognition task and assessments of pitch, intensity, and duration sensitivity. The results showed that the number of dialect tones positively predicted emotion recognition accuracy, an effect fully mediated by sensitivity to intensity but not by pitch or duration. Collectively, these findings highlight the intertwined roles of culture and language in emotional prosody communication, underscoring the need to incorporate greater cultural and linguistic diversity in future research.

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Abstract: Emotions are conveyed through facial expressions and vocal tones, but how do observers perceive overall emotion when these channels conflict? This research systematically investigated how individuals decode emotions in three representative incongruent pairings: anger-happiness, happiness-sadness, and anger-sadness. Across six preregistered experiments (N = 359), both multidimensional ratings and open-ended responses were collected to enable a comprehensive and nuanced examination of how conflicting emotional cues are integrated. The results showed a robust facial dominance effect in anger-happiness pairings, with participants primarily relying on facial cues to interpret emotion. In contrast, vocal cues became more dominant in shaping the emotional perception in anger-sadness pairings. The happiness-sadness pairing displayed a more complex pattern, as participants either perceived an alternative emotion or a blend of emotions. To explain these patterns, we proposed and tested the emotion similarity hypothesis, which suggests that the morphological and acoustic

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Communication: **Folyi Timea - Fine-grained affective experiences can occur spontaneously and involuntarily: Nine different types of affective feelings indirectly evoked by music**

Abstract: Do fine-grained affective experiences that go beyond broad affective dimensions (e.g., affective valence, arousal) or discrete emotions (e.g., happiness, sadness, fear) emerge as a result of reflective processing, or can they, despite their complexity, emerge as a result of “automatic” processing? The present study investigated whether complex and finely differentiated affective experiences evoked by music can arise spontaneously and involuntarily. Specifically, we focused on nine specific affective feelings that have been associated with music in self-report measures (e.g., feeling dreamy, serene, or heroic; Cowen et al., 2020), and we presented short (2000-2800 ms long) snippets of music that, according to self-report, predominantly evoke one of the nine feelings. Indirect processing conditions were realized in an affect misattribution procedure (e.g., Payne & Lundberg, 2014). In this task, the music snippets were presented as primes shortly before ambiguous targets, that is, abstract paintings that were previously rated as neutral in terms of valence and arousal. The task of the participants (N = 59) was to categorize the feeling evoked by the ambiguous pictures while ignoring the preceding primes. We calculated misattribution scores, which reflect biased responses towards the feeling associated with the task-irrelevant music. The results showed that the feelings associated with the music significantly biased the responses to the targets; significant misattribution effects emerged for all nine specific feelings. Responses in this procedure occurred when the music snippets were presented briefly and they were task-irrelevant. Thus, the music-induced affective experiences emerged spontaneously and under indirect processing conditions. Beyond the conceptualization of fine-grained affective experiences, our results may contribute to an understanding of the underlying processes of how such affective experiences might emerge. References Cowen, A. S., Fang, X., Sauter, D., & Keltner, D. (2020). What music makes us feel: At least 13 dimensions organize subjective experiences associated with music across different cultures. *Proceedings of the National Academy of Sciences*, 117(4), 1924–1934. <https://doi.org/10.1073/pnas.1910704117> Payne, K., & Lundberg, K. (2014). The Affect Misattribution Procedure: Ten Years of Evidence on Reliability, Validity, and Mechanisms: Affect Misattribution Procedure. *Social and Personality Psychology Compass*, 8(12), 672–686. <https://doi.org/10.1111/spc3.12148>

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Communication: **Discussion**

Parallel Session 6 : T5

Session	Parallel Session 1
Track	T1
Time	11:15 - 12:15
Type	Talks
Title	Emotional and Sensory Modality Shift Chair: Xia Fang

Communication: **Pan Zhihe - Emotion Communication in Speech Prosody: The Role of Culture and Language Tone**

Abstract: Despite decades of research, the influence of cultural and linguistic diversity on emotional prosody remains incompletely understood. The present work examined how historical heterogeneity and language tone shape emotional prosody recognition across two studies. In Study 1, a reanalysis of 46 studies spanning 43 cultures revealed that emotional prosody from historically heterogeneous cultures was more accurately recognized by individuals from different cultural backgrounds than that from homogeneous cultures. Moreover, speakers of tonal languages demonstrated higher recognition accuracy compared to speakers of non-tonal languages. To further investigate the role of language tone in emotional prosody perception, Study 2 leveraged the diversity of Chinese dialects, which vary in the number of tones. A total of 223 participants fluent in dialects featuring 3 to 10 tones completed an emotional prosody recognition task and assessments of pitch, intensity, and duration sensitivity. The results showed that the number of dialect tones positively predicted emotion recognition accuracy, an effect fully mediated by sensitivity to intensity but not by pitch or duration. Collectively, these findings highlight the intertwined roles of culture and language in emotional prosody communication, underscoring the need to incorporate greater cultural and linguistic diversity in future research.

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Communication: **Discussion**

Parallel Session 7 : T1

Session	Parallel Session 1
Track	T1
Time	11:15 - 12:15
Type	Talks
Title	Emotional and Sensory Modality Shift Chair: Xia Fang

Communication: **Pan Zhihe - Emotion Communication in Speech Prosody: The Role of Culture and Language Tone**

Abstract: Despite decades of research, the influence of cultural and linguistic diversity on emotional prosody remains incompletely understood. The present work examined how historical heterogeneity and language tone shape emotional prosody recognition across two studies. In Study 1, a reanalysis of 46 studies spanning 43 cultures revealed that emotional prosody from historically heterogeneous cultures was more accurately recognized by individuals from different cultural backgrounds than that from homogeneous cultures. Moreover, speakers of tonal languages demonstrated higher recognition accuracy compared to speakers of non-tonal languages. To further investigate the role of language tone in emotional prosody perception, Study 2 leveraged the diversity of Chinese dialects, which vary in the number of tones. A total of 223 participants fluent in dialects featuring 3 to 10 tones completed an emotional prosody recognition task and assessments of pitch, intensity, and duration sensitivity. The results showed that the number of dialect tones positively predicted emotion recognition accuracy, an effect fully mediated by sensitivity to intensity but not by pitch or duration. Collectively, these findings highlight the intertwined roles of culture and language in emotional prosody communication, underscoring the need to incorporate greater cultural and linguistic diversity in future research.

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Communication: **Discussion**

Parallel Session 7 : T2

Session	Parallel Session 1
Track	T1
Time	11:15 - 12:15
Type	Talks
Title	Emotional and Sensory Modality Shift Chair: Xia Fang

Communication: **Pan Zhihe - Emotion Communication in Speech Prosody: The Role of Culture and Language Tone**

Abstract: Despite decades of research, the influence of cultural and linguistic diversity on emotional prosody remains incompletely understood. The present work examined how historical heterogeneity and language tone shape emotional prosody recognition across two studies. In Study 1, a reanalysis of 46 studies spanning 43 cultures revealed that emotional prosody from historically heterogeneous cultures was more accurately recognized by individuals from different cultural backgrounds than that from homogeneous cultures. Moreover, speakers of tonal languages demonstrated higher recognition accuracy compared to speakers of non-tonal languages. To further investigate the role of language tone in emotional prosody perception, Study 2 leveraged the diversity of Chinese dialects, which vary in the number of tones. A total of 223 participants fluent in dialects featuring 3 to 10 tones completed an emotional prosody recognition task and assessments of pitch, intensity, and duration sensitivity. The results showed that the number of dialect tones positively predicted emotion recognition accuracy, an effect fully mediated by sensitivity to intensity but not by pitch or duration. Collectively, these findings highlight the intertwined roles of culture and language in emotional prosody communication, underscoring the need to incorporate greater cultural and linguistic diversity in future research.

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Communication: **Folyi Timea - Fine-grained affective experiences can occur spontaneously and involuntarily: Nine different types of affective feelings indirectly evoked by music**

Abstract: Do fine-grained affective experiences that go beyond broad affective dimensions (e.g., affective valence, arousal) or discrete emotions (e.g., happiness, sadness, fear) emerge as a result of reflective processing, or can they, despite their complexity, emerge as a result of “automatic” processing? The present study investigated whether complex and finely differentiated affective experiences evoked by music can arise spontaneously and involuntarily. Specifically, we focused on nine specific affective feelings that have been associated with music in self-report measures (e.g., feeling dreamy, serene, or heroic; Cowen et al., 2020), and we presented short (2000-2800 ms long) snippets of music that, according to self-report, predominantly evoke one of the nine feelings. Indirect processing conditions were realized in an affect misattribution procedure (e.g., Payne & Lundberg, 2014). In this task, the music snippets were presented as primes shortly before ambiguous targets, that is, abstract paintings that were previously rated as neutral in terms of valence and arousal. The task of the participants (N = 59) was to categorize the feeling evoked by the ambiguous pictures while ignoring the preceding primes. We calculated misattribution scores, which reflect biased responses towards the feeling associated with the task-irrelevant music. The results showed that the feelings associated with the music significantly biased the responses to the targets; significant misattribution effects emerged for all nine specific feelings. Responses in this procedure occurred when the music snippets were presented briefly and they were task-irrelevant. Thus, the music-induced affective experiences emerged spontaneously and under indirect processing conditions. Beyond the conceptualization of fine-grained affective experiences, our results may contribute to an understanding of the underlying processes of how such affective experiences might emerge. References Cowen, A. S., Fang, X., Sauter, D., & Keltner, D. (2020). What music makes us feel: At least 13 dimensions organize subjective experiences associated with music across different cultures. *Proceedings of the National Academy of Sciences*, 117(4), 1924–1934. <https://doi.org/10.1073/pnas.1910704117> Payne, K., & Lundberg, K. (2014). The Affect Misattribution Procedure: Ten Years of Evidence on Reliability, Validity, and Mechanisms: Affect Misattribution Procedure. *Social and Personality Psychology Compass*, 8(12), 672–686. <https://doi.org/10.1111/spc3.12148>

Communication: **Bell Meir Argaman - Social Context Shapes Facial Synchronization - A Virtual Reality Study**

Abstract: Facial synchronization is a key mechanism in social bonding, yet the role of social context remains underexplored. The current study employed a novel Virtual Reality (VR) paradigm to examine how relationship context (friends vs. strangers) influences facial activation and synchronization. By employing a controlled VR setting, this study overcomes key limitations of naturalistic paradigms, including reciprocal and task-driven synchronization effects. Participants (n= 107) were invited to a VR environment with a friend (n=52) or a stranger (n=55). They

were told that they were viewing the live facial expressions of their partner, while they are listening together to short audio clips. In reality, all participants were presented with identical pre-recorded avatar expressions, ensuring experimental control and eliminating reciprocal influences. Post-experiment, participants rated the avatars' realism, confirming they believed the avatars reflected their partner's expressions. Results show greater activation ($t(95) = 2.602$, $p = .011$) and synchronization ($t(103) = 2.76$, $p = 0.007$) of friends participants (vs strangers). Moreover, although enjoyment ratings did not differ significantly between groups, we found that the more participants were synched with the avatar, the more they enjoyed the audio clip ($t(105) = 4.277$, $p < .001$). These findings provide robust evidence that relationship context causally influences facial activation and synchronization. They further highlight the dynamic interplay between social context and non-verbal communication, offering insights with potential applications in social and clinical interventions.

Communication: **Discussion**

Parallel Session 7 : T3

Session	Parallel Session 1
Track	T1
Time	11:15 - 12:15
Type	Talks
Title	Emotional and Sensory Modality Shift Chair: Xia Fang

Communication: **Pan Zhihe - Emotion Communication in Speech Prosody: The Role of Culture and Language Tone**

Abstract: Despite decades of research, the influence of cultural and linguistic diversity on emotional prosody remains incompletely understood. The present work examined how historical heterogeneity and language tone shape emotional prosody recognition across two studies. In Study 1, a reanalysis of 46 studies spanning 43 cultures revealed that emotional prosody from historically heterogeneous cultures was more accurately recognized by individuals from different cultural backgrounds than that from homogeneous cultures. Moreover, speakers of tonal languages demonstrated higher recognition accuracy compared to speakers of non-tonal languages. To further investigate the role of language tone in emotional prosody perception, Study 2 leveraged the diversity of Chinese dialects, which vary in the number of tones. A total of 223 participants fluent in dialects featuring 3 to 10 tones completed an emotional prosody recognition task and assessments of pitch, intensity, and duration sensitivity. The results showed that the number of dialect tones positively predicted emotion recognition accuracy, an effect fully mediated by sensitivity to intensity but not by pitch or duration. Collectively, these findings highlight the intertwined roles of culture and language in emotional prosody communication, underscoring the need to incorporate greater cultural and linguistic diversity in future research.

Communication: **Fang Xia - Bimodal Emotion Decoding: When Faces and Voices Diverge**

Abstract: Emotions are conveyed through facial expressions and vocal tones, but how do observers perceive overall emotion when these channels conflict? This research systematically investigated how individuals decode emotions in three representative incongruent pairings: anger-happiness, happiness-sadness, and anger-sadness. Across six preregistered experiments (N = 359), both multidimensional ratings and open-ended responses were collected to enable a comprehensive and nuanced examination of how conflicting emotional cues are integrated. The results showed a robust facial dominance effect in anger-happiness pairings, with participants primarily relying on facial cues to interpret emotion. In contrast, vocal cues became more dominant in shaping the emotional perception in anger-sadness pairings. The happiness-sadness pairing displayed a more complex pattern, as participants either perceived an alternative emotion or a blend of emotions. To explain these patterns, we proposed and tested the emotion similarity hypothesis, which suggests that the morphological and acoustic

similarities between emotional expressions facilitate the integration of facial and vocal cues into a unified emotional perception. These findings provide valuable insights into how conflicting emotional cues are resolved and offer a refined framework for studying bimodal emotion perception across contexts.

Communication: **Folyi Timea - Fine-grained affective experiences can occur spontaneously and involuntarily: Nine different types of affective feelings indirectly evoked by music**

Abstract: Do fine-grained affective experiences that go beyond broad affective dimensions (e.g., affective valence, arousal) or discrete emotions (e.g., happiness, sadness, fear) emerge as a result of reflective processing, or can they, despite their complexity, emerge as a result of “automatic” processing? The present study investigated whether complex and finely differentiated affective experiences evoked by music can arise spontaneously and involuntarily. Specifically, we focused on nine specific affective feelings that have been associated with music in self-report measures (e.g., feeling dreamy, serene, or heroic; Cowen et al., 2020), and we presented short (2000-2800 ms long) snippets of music that, according to self-report, predominantly evoke one of the nine feelings. Indirect processing conditions were realized in an affect misattribution procedure (e.g., Payne & Lundberg, 2014). In this task, the music snippets were presented as primes shortly before ambiguous targets, that is, abstract paintings that were previously rated as neutral in terms of valence and arousal. The task of the participants (N = 59) was to categorize the feeling evoked by the ambiguous pictures while ignoring the preceding primes. We calculated misattribution scores, which reflect biased responses towards the feeling associated with the task-irrelevant music. The results showed that the feelings associated with the music significantly biased the responses to the targets; significant misattribution effects emerged for all nine specific feelings. Responses in this procedure occurred when the music snippets were presented briefly and they were task-irrelevant. Thus, the music-induced affective experiences emerged spontaneously and under indirect processing conditions. Beyond the conceptualization of fine-grained affective experiences, our results may contribute to an understanding of the underlying processes of how such affective experiences might emerge. References Cowen, A. S., Fang, X., Sauter, D., & Keltner, D. (2020). What music makes us feel: At least 13 dimensions organize subjective experiences associated with music across different cultures. *Proceedings of the National Academy of Sciences*, 117(4), 1924–1934. <https://doi.org/10.1073/pnas.1910704117> Payne, K., & Lundberg, K. (2014). The Affect Misattribution Procedure: Ten Years of Evidence on Reliability, Validity, and Mechanisms: Affect Misattribution Procedure. *Social and Personality Psychology Compass*, 8(12), 672–686. <https://doi.org/10.1111/spc3.12148>

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Abstract: Facial synchronization is a key mechanism in social bonding, yet the role of social context remains underexplored. The current study employed a novel Virtual Reality (VR) paradigm to examine how relationship context (friends vs. strangers) influences facial activation and synchronization. By employing a controlled VR setting, this study overcomes key limitations of naturalistic paradigms, including reciprocal and task-driven synchronization effects. Participants (n= 107) were invited to a VR environment with a friend (n=52) or a stranger (n=55). They

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Communication: **Discussion**

Parallel Session 7 : T4

Session	Parallel Session 1
Track	T1
Time	11:15 - 12:15
Type	Talks
Title	Emotional and Sensory Modality Shift Chair: Xia Fang

Communication: **Pan Zhihe - Emotion Communication in Speech Prosody: The Role of Culture and Language Tone**

Abstract: Despite decades of research, the influence of cultural and linguistic diversity on emotional prosody remains incompletely understood. The present work examined how historical heterogeneity and language tone shape emotional prosody recognition across two studies. In Study 1, a reanalysis of 46 studies spanning 43 cultures revealed that emotional prosody from historically heterogeneous cultures was more accurately recognized by individuals from different cultural backgrounds than that from homogeneous cultures. Moreover, speakers of tonal languages demonstrated higher recognition accuracy compared to speakers of non-tonal languages. To further investigate the role of language tone in emotional prosody perception, Study 2 leveraged the diversity of Chinese dialects, which vary in the number of tones. A total of 223 participants fluent in dialects featuring 3 to 10 tones completed an emotional prosody recognition task and assessments of pitch, intensity, and duration sensitivity. The results showed that the number of dialect tones positively predicted emotion recognition accuracy, an effect fully mediated by sensitivity to intensity but not by pitch or duration. Collectively, these findings highlight the intertwined roles of culture and language in emotional prosody communication, underscoring the need to incorporate greater cultural and linguistic diversity in future research.

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Abstract: Emotions are conveyed through facial expressions and vocal tones, but how do observers perceive overall emotion when these channels conflict? This research systematically investigated how individuals decode emotions in three representative incongruent pairings: anger-happiness, happiness-sadness, and anger-sadness. Across six preregistered experiments (N = 359), both multidimensional ratings and open-ended responses were collected to enable a comprehensive and nuanced examination of how conflicting emotional cues are integrated. The results showed a robust facial dominance effect in anger-happiness pairings, with participants primarily relying on facial cues to interpret emotion. In contrast, vocal cues became more dominant in shaping the emotional perception in anger-sadness pairings. The happiness-sadness pairing displayed a more complex pattern, as participants either perceived an alternative emotion or a blend of emotions. To explain these patterns, we proposed and tested the emotion similarity hypothesis, which suggests that the morphological and acoustic

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Communication: **Folyi Timea - Fine-grained affective experiences can occur spontaneously and involuntarily: Nine different types of affective feelings indirectly evoked by music**

Abstract: Do fine-grained affective experiences that go beyond broad affective dimensions (e.g., affective valence, arousal) or discrete emotions (e.g., happiness, sadness, fear) emerge as a result of reflective processing, or can they, despite their complexity, emerge as a result of “automatic” processing? The present study investigated whether complex and finely differentiated affective experiences evoked by music can arise spontaneously and involuntarily. Specifically, we focused on nine specific affective feelings that have been associated with music in self-report measures (e.g., feeling dreamy, serene, or heroic; Cowen et al., 2020), and we presented short (2000-2800 ms long) snippets of music that, according to self-report, predominantly evoke one of the nine feelings. Indirect processing conditions were realized in an affect misattribution procedure (e.g., Payne & Lundberg, 2014). In this task, the music snippets were presented as primes shortly before ambiguous targets, that is, abstract paintings that were previously rated as neutral in terms of valence and arousal. The task of the participants (N = 59) was to categorize the feeling evoked by the ambiguous pictures while ignoring the preceding primes. We calculated misattribution scores, which reflect biased responses towards the feeling associated with the task-irrelevant music. The results showed that the feelings associated with the music significantly biased the responses to the targets; significant misattribution effects emerged for all nine specific feelings. Responses in this procedure occurred when the music snippets were presented briefly and they were task-irrelevant. Thus, the music-induced affective experiences emerged spontaneously and under indirect processing conditions. Beyond the conceptualization of fine-grained affective experiences, our results may contribute to an understanding of the underlying processes of how such affective experiences might emerge. References Cowen, A. S., Fang, X., Sauter, D., & Keltner, D. (2020). What music makes us feel: At least 13 dimensions organize subjective experiences associated with music across different cultures. *Proceedings of the National Academy of Sciences*, 117(4), 1924–1934. <https://doi.org/10.1073/pnas.1910704117> Payne, K., & Lundberg, K. (2014). The Affect Misattribution Procedure: Ten Years of Evidence on Reliability, Validity, and Mechanisms: Affect Misattribution Procedure. *Social and Personality Psychology Compass*, 8(12), 672–686. <https://doi.org/10.1111/spc3.12148>

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Communication: **Discussion**

Parallel Session 7 : T5

Session	Parallel Session 1
Track	T1
Time	11:15 - 12:15
Type	Talks
Title	Emotional and Sensory Modality Shift Chair: Xia Fang

Communication: **Pan Zhihe - Emotion Communication in Speech Prosody: The Role of Culture and Language Tone**

Abstract: Despite decades of research, the influence of cultural and linguistic diversity on emotional prosody remains incompletely understood. The present work examined how historical heterogeneity and language tone shape emotional prosody recognition across two studies. In Study 1, a reanalysis of 46 studies spanning 43 cultures revealed that emotional prosody from historically heterogeneous cultures was more accurately recognized by individuals from different cultural backgrounds than that from homogeneous cultures. Moreover, speakers of tonal languages demonstrated higher recognition accuracy compared to speakers of non-tonal languages. To further investigate the role of language tone in emotional prosody perception, Study 2 leveraged the diversity of Chinese dialects, which vary in the number of tones. A total of 223 participants fluent in dialects featuring 3 to 10 tones completed an emotional prosody recognition task and assessments of pitch, intensity, and duration sensitivity. The results showed that the number of dialect tones positively predicted emotion recognition accuracy, an effect fully mediated by sensitivity to intensity but not by pitch or duration. Collectively, these findings highlight the intertwined roles of culture and language in emotional prosody communication, underscoring the need to incorporate greater cultural and linguistic diversity in future research.

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Communication: **Discussion**

Parallel Session 8 : T1

Session	Parallel Session 1
Track	T1
Time	11:15 - 12:15
Type	Talks
Title	Emotional and Sensory Modality Shift Chair: Xia Fang

Communication: **Pan Zhihe - Emotion Communication in Speech Prosody: The Role of Culture and Language Tone**

Abstract: Despite decades of research, the influence of cultural and linguistic diversity on emotional prosody remains incompletely understood. The present work examined how historical heterogeneity and language tone shape emotional prosody recognition across two studies. In Study 1, a reanalysis of 46 studies spanning 43 cultures revealed that emotional prosody from historically heterogeneous cultures was more accurately recognized by individuals from different cultural backgrounds than that from homogeneous cultures. Moreover, speakers of tonal languages demonstrated higher recognition accuracy compared to speakers of non-tonal languages. To further investigate the role of language tone in emotional prosody perception, Study 2 leveraged the diversity of Chinese dialects, which vary in the number of tones. A total of 223 participants fluent in dialects featuring 3 to 10 tones completed an emotional prosody recognition task and assessments of pitch, intensity, and duration sensitivity. The results showed that the number of dialect tones positively predicted emotion recognition accuracy, an effect fully mediated by sensitivity to intensity but not by pitch or duration. Collectively, these findings highlight the intertwined roles of culture and language in emotional prosody communication, underscoring the need to incorporate greater cultural and linguistic diversity in future research.

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Communication: **Discussion**

Parallel Session 8 : T2

Session	Parallel Session 1
Track	T1
Time	11:15 - 12:15
Type	Talks
Title	Emotional and Sensory Modality Shift Chair: Xia Fang

Communication: **Pan Zhihe - Emotion Communication in Speech Prosody: The Role of Culture and Language Tone**

Abstract: Despite decades of research, the influence of cultural and linguistic diversity on emotional prosody remains incompletely understood. The present work examined how historical heterogeneity and language tone shape emotional prosody recognition across two studies. In Study 1, a reanalysis of 46 studies spanning 43 cultures revealed that emotional prosody from historically heterogeneous cultures was more accurately recognized by individuals from different cultural backgrounds than that from homogeneous cultures. Moreover, speakers of tonal languages demonstrated higher recognition accuracy compared to speakers of non-tonal languages. To further investigate the role of language tone in emotional prosody perception, Study 2 leveraged the diversity of Chinese dialects, which vary in the number of tones. A total of 223 participants fluent in dialects featuring 3 to 10 tones completed an emotional prosody recognition task and assessments of pitch, intensity, and duration sensitivity. The results showed that the number of dialect tones positively predicted emotion recognition accuracy, an effect fully mediated by sensitivity to intensity but not by pitch or duration. Collectively, these findings highlight the intertwined roles of culture and language in emotional prosody communication, underscoring the need to incorporate greater cultural and linguistic diversity in future research.

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Communication: **Folyi Timea - Fine-grained affective experiences can occur spontaneously and involuntarily: Nine different types of affective feelings indirectly evoked by music**

Abstract: Do fine-grained affective experiences that go beyond broad affective dimensions (e.g., affective valence, arousal) or discrete emotions (e.g., happiness, sadness, fear) emerge as a result of reflective processing, or can they, despite their complexity, emerge as a result of “automatic” processing? The present study investigated whether complex and finely differentiated affective experiences evoked by music can arise spontaneously and involuntarily. Specifically, we focused on nine specific affective feelings that have been associated with music in self-report measures (e.g., feeling dreamy, serene, or heroic; Cowen et al., 2020), and we presented short (2000-2800 ms long) snippets of music that, according to self-report, predominantly evoke one of the nine feelings. Indirect processing conditions were realized in an affect misattribution procedure (e.g., Payne & Lundberg, 2014). In this task, the music snippets were presented as primes shortly before ambiguous targets, that is, abstract paintings that were previously rated as neutral in terms of valence and arousal. The task of the participants (N = 59) was to categorize the feeling evoked by the ambiguous pictures while ignoring the preceding primes. We calculated misattribution scores, which reflect biased responses towards the feeling associated with the task-irrelevant music. The results showed that the feelings associated with the music significantly biased the responses to the targets; significant misattribution effects emerged for all nine specific feelings. Responses in this procedure occurred when the music snippets were presented briefly and they were task-irrelevant. Thus, the music-induced affective experiences emerged spontaneously and under indirect processing conditions. Beyond the conceptualization of fine-grained affective experiences, our results may contribute to an understanding of the underlying processes of how such affective experiences might emerge. References Cowen, A. S., Fang, X., Sauter, D., & Keltner, D. (2020). What music makes us feel: At least 13 dimensions organize subjective experiences associated with music across different cultures. *Proceedings of the National Academy of Sciences*, 117(4), 1924–1934. <https://doi.org/10.1073/pnas.1910704117> Payne, K., & Lundberg, K. (2014). The Affect Misattribution Procedure: Ten Years of Evidence on Reliability, Validity, and Mechanisms: Affect Misattribution Procedure. *Social and Personality Psychology Compass*, 8(12), 672–686. <https://doi.org/10.1111/spc3.12148>

Communication: **Bell Meir Argaman - Social Context Shapes Facial Synchronization - A Virtual Reality Study**

Abstract: Facial synchronization is a key mechanism in social bonding, yet the role of social context remains underexplored. The current study employed a novel Virtual Reality (VR) paradigm to examine how relationship context (friends vs. strangers) influences facial activation and synchronization. By employing a controlled VR setting, this study overcomes key limitations of naturalistic paradigms, including reciprocal and task-driven synchronization effects. Participants (n= 107) were invited to a VR environment with a friend (n=52) or a stranger (n=55). They

were told that they were viewing the live facial expressions of their partner, while they are listening together to short audio clips. In reality, all participants were presented with identical pre-recorded avatar expressions, ensuring experimental control and eliminating reciprocal influences. Post-experiment, participants rated the avatars' realism, confirming they believed the avatars reflected their partner's expressions. Results show greater activation ($t(95) = 2.602$, $p = .011$) and synchronization ($t(103) = 2.76$, $p = 0.007$) of friends participants (vs strangers). Moreover, although enjoyment ratings did not differ significantly between groups, we found that the more participants were synched with the avatar, the more they enjoyed the audio clip ($t(105) = 4.277$, $p < .001$). These findings provide robust evidence that relationship context causally influences facial activation and synchronization. They further highlight the dynamic interplay between social context and non-verbal communication, offering insights with potential applications in social and clinical interventions.

Communication: **Discussion**

Parallel Session 8 : T3

Session	Parallel Session 1
Track	T1
Time	11:15 - 12:15
Type	Talks
Title	Emotional and Sensory Modality Shift Chair: Xia Fang

Communication: **Pan Zhihe - Emotion Communication in Speech Prosody: The Role of Culture and Language Tone**

Abstract: Despite decades of research, the influence of cultural and linguistic diversity on emotional prosody remains incompletely understood. The present work examined how historical heterogeneity and language tone shape emotional prosody recognition across two studies. In Study 1, a reanalysis of 46 studies spanning 43 cultures revealed that emotional prosody from historically heterogeneous cultures was more accurately recognized by individuals from different cultural backgrounds than that from homogeneous cultures. Moreover, speakers of tonal languages demonstrated higher recognition accuracy compared to speakers of non-tonal languages. To further investigate the role of language tone in emotional prosody perception, Study 2 leveraged the diversity of Chinese dialects, which vary in the number of tones. A total of 223 participants fluent in dialects featuring 3 to 10 tones completed an emotional prosody recognition task and assessments of pitch, intensity, and duration sensitivity. The results showed that the number of dialect tones positively predicted emotion recognition accuracy, an effect fully mediated by sensitivity to intensity but not by pitch or duration. Collectively, these findings highlight the intertwined roles of culture and language in emotional prosody communication, underscoring the need to incorporate greater cultural and linguistic diversity in future research.

Communication: **Fang Xia - Bimodal Emotion Decoding: When Faces and Voices Diverge**

Abstract: Emotions are conveyed through facial expressions and vocal tones, but how do observers perceive overall emotion when these channels conflict? This research systematically investigated how individuals decode emotions in three representative incongruent pairings: anger-happiness, happiness-sadness, and anger-sadness. Across six preregistered experiments (N = 359), both multidimensional ratings and open-ended responses were collected to enable a comprehensive and nuanced examination of how conflicting emotional cues are integrated. The results showed a robust facial dominance effect in anger-happiness pairings, with participants primarily relying on facial cues to interpret emotion. In contrast, vocal cues became more dominant in shaping the emotional perception in anger-sadness pairings. The happiness-sadness pairing displayed a more complex pattern, as participants either perceived an alternative emotion or a blend of emotions. To explain these patterns, we proposed and tested the emotion similarity hypothesis, which suggests that the morphological and acoustic

similarities between emotional expressions facilitate the integration of facial and vocal cues into a unified emotional perception. These findings provide valuable insights into how conflicting emotional cues are resolved and offer a refined framework for studying bimodal emotion perception across contexts.

Communication: **Folyi Timea - Fine-grained affective experiences can occur spontaneously and involuntarily: Nine different types of affective feelings indirectly evoked by music**

Abstract: Do fine-grained affective experiences that go beyond broad affective dimensions (e.g., affective valence, arousal) or discrete emotions (e.g., happiness, sadness, fear) emerge as a result of reflective processing, or can they, despite their complexity, emerge as a result of “automatic” processing? The present study investigated whether complex and finely differentiated affective experiences evoked by music can arise spontaneously and involuntarily. Specifically, we focused on nine specific affective feelings that have been associated with music in self-report measures (e.g., feeling dreamy, serene, or heroic; Cowen et al., 2020), and we presented short (2000-2800 ms long) snippets of music that, according to self-report, predominantly evoke one of the nine feelings. Indirect processing conditions were realized in an affect misattribution procedure (e.g., Payne & Lundberg, 2014). In this task, the music snippets were presented as primes shortly before ambiguous targets, that is, abstract paintings that were previously rated as neutral in terms of valence and arousal. The task of the participants (N = 59) was to categorize the feeling evoked by the ambiguous pictures while ignoring the preceding primes. We calculated misattribution scores, which reflect biased responses towards the feeling associated with the task-irrelevant music. The results showed that the feelings associated with the music significantly biased the responses to the targets; significant misattribution effects emerged for all nine specific feelings. Responses in this procedure occurred when the music snippets were presented briefly and they were task-irrelevant. Thus, the music-induced affective experiences emerged spontaneously and under indirect processing conditions. Beyond the conceptualization of fine-grained affective experiences, our results may contribute to an understanding of the underlying processes of how such affective experiences might emerge. References Cowen, A. S., Fang, X., Sauter, D., & Keltner, D. (2020). What music makes us feel: At least 13 dimensions organize subjective experiences associated with music across different cultures. *Proceedings of the National Academy of Sciences*, 117(4), 1924–1934. <https://doi.org/10.1073/pnas.1910704117> Payne, K., & Lundberg, K. (2014). The Affect Misattribution Procedure: Ten Years of Evidence on Reliability, Validity, and Mechanisms: Affect Misattribution Procedure. *Social and Personality Psychology Compass*, 8(12), 672–686. <https://doi.org/10.1111/spc3.12148>

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Abstract: Facial synchronization is a key mechanism in social bonding, yet the role of social context remains underexplored. The current study employed a novel Virtual Reality (VR) paradigm to examine how relationship context (friends vs. strangers) influences facial activation and synchronization. By employing a controlled VR setting, this study overcomes key limitations of naturalistic paradigms, including reciprocal and task-driven synchronization effects. Participants (n= 107) were invited to a VR environment with a friend (n=52) or a stranger (n=55). They

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Communication: **Discussion**

Parallel Session 8 : T4

Session	Parallel Session 1
Track	T1
Time	11:15 - 12:15
Type	Talks
Title	Emotional and Sensory Modality Shift Chair: Xia Fang

Communication: **Pan Zhihe - Emotion Communication in Speech Prosody: The Role of Culture and Language Tone**

Abstract: Despite decades of research, the influence of cultural and linguistic diversity on emotional prosody remains incompletely understood. The present work examined how historical heterogeneity and language tone shape emotional prosody recognition across two studies. In Study 1, a reanalysis of 46 studies spanning 43 cultures revealed that emotional prosody from historically heterogeneous cultures was more accurately recognized by individuals from different cultural backgrounds than that from homogeneous cultures. Moreover, speakers of tonal languages demonstrated higher recognition accuracy compared to speakers of non-tonal languages. To further investigate the role of language tone in emotional prosody perception, Study 2 leveraged the diversity of Chinese dialects, which vary in the number of tones. A total of 223 participants fluent in dialects featuring 3 to 10 tones completed an emotional prosody recognition task and assessments of pitch, intensity, and duration sensitivity. The results showed that the number of dialect tones positively predicted emotion recognition accuracy, an effect fully mediated by sensitivity to intensity but not by pitch or duration. Collectively, these findings highlight the intertwined roles of culture and language in emotional prosody communication, underscoring the need to incorporate greater cultural and linguistic diversity in future research.

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Abstract: Emotions are conveyed through facial expressions and vocal tones, but how do observers perceive overall emotion when these channels conflict? This research systematically investigated how individuals decode emotions in three representative incongruent pairings: anger-happiness, happiness-sadness, and anger-sadness. Across six preregistered experiments (N = 359), both multidimensional ratings and open-ended responses were collected to enable a comprehensive and nuanced examination of how conflicting emotional cues are integrated. The results showed a robust facial dominance effect in anger-happiness pairings, with participants primarily relying on facial cues to interpret emotion. In contrast, vocal cues became more dominant in shaping the emotional perception in anger-sadness pairings. The happiness-sadness pairing displayed a more complex pattern, as participants either perceived an alternative emotion or a blend of emotions. To explain these patterns, we proposed and tested the emotion similarity hypothesis, which suggests that the morphological and acoustic

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Communication: **Folyi Timea - Fine-grained affective experiences can occur spontaneously and involuntarily: Nine different types of affective feelings indirectly evoked by music**

Abstract: Do fine-grained affective experiences that go beyond broad affective dimensions (e.g., affective valence, arousal) or discrete emotions (e.g., happiness, sadness, fear) emerge as a result of reflective processing, or can they, despite their complexity, emerge as a result of “automatic” processing? The present study investigated whether complex and finely differentiated affective experiences evoked by music can arise spontaneously and involuntarily. Specifically, we focused on nine specific affective feelings that have been associated with music in self-report measures (e.g., feeling dreamy, serene, or heroic; Cowen et al., 2020), and we presented short (2000-2800 ms long) snippets of music that, according to self-report, predominantly evoke one of the nine feelings. Indirect processing conditions were realized in an affect misattribution procedure (e.g., Payne & Lundberg, 2014). In this task, the music snippets were presented as primes shortly before ambiguous targets, that is, abstract paintings that were previously rated as neutral in terms of valence and arousal. The task of the participants (N = 59) was to categorize the feeling evoked by the ambiguous pictures while ignoring the preceding primes. We calculated misattribution scores, which reflect biased responses towards the feeling associated with the task-irrelevant music. The results showed that the feelings associated with the music significantly biased the responses to the targets; significant misattribution effects emerged for all nine specific feelings. Responses in this procedure occurred when the music snippets were presented briefly and they were task-irrelevant. Thus, the music-induced affective experiences emerged spontaneously and under indirect processing conditions. Beyond the conceptualization of fine-grained affective experiences, our results may contribute to an understanding of the underlying processes of how such affective experiences might emerge. References Cowen, A. S., Fang, X., Sauter, D., & Keltner, D. (2020). What music makes us feel: At least 13 dimensions organize subjective experiences associated with music across different cultures. *Proceedings of the National Academy of Sciences*, 117(4), 1924–1934. <https://doi.org/10.1073/pnas.1910704117> Payne, K., & Lundberg, K. (2014). The Affect Misattribution Procedure: Ten Years of Evidence on Reliability, Validity, and Mechanisms: Affect Misattribution Procedure. *Social and Personality Psychology Compass*, 8(12), 672–686. <https://doi.org/10.1111/spc3.12148>

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Communication: **Discussion**

Parallel Session 8 : T5

Session	Parallel Session 1
Track	T1
Time	11:15 - 12:15
Type	Talks
Title	Emotional and Sensory Modality Shift Chair: Xia Fang

Communication: **Pan Zhihe - Emotion Communication in Speech Prosody: The Role of Culture and Language Tone**

Abstract: Despite decades of research, the influence of cultural and linguistic diversity on emotional prosody remains incompletely understood. The present work examined how historical heterogeneity and language tone shape emotional prosody recognition across two studies. In Study 1, a reanalysis of 46 studies spanning 43 cultures revealed that emotional prosody from historically heterogeneous cultures was more accurately recognized by individuals from different cultural backgrounds than that from homogeneous cultures. Moreover, speakers of tonal languages demonstrated higher recognition accuracy compared to speakers of non-tonal languages. To further investigate the role of language tone in emotional prosody perception, Study 2 leveraged the diversity of Chinese dialects, which vary in the number of tones. A total of 223 participants fluent in dialects featuring 3 to 10 tones completed an emotional prosody recognition task and assessments of pitch, intensity, and duration sensitivity. The results showed that the number of dialect tones positively predicted emotion recognition accuracy, an effect fully mediated by sensitivity to intensity but not by pitch or duration. Collectively, these findings highlight the intertwined roles of culture and language in emotional prosody communication, underscoring the need to incorporate greater cultural and linguistic diversity in future research.

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Communication: **Discussion**

Parallel Session 9 : T1

Session	Parallel Session 1
Track	T1
Time	11:15 - 12:15
Type	Talks
Title	Emotional and Sensory Modality Shift Chair: Xia Fang

Communication: **Pan Zhihe - Emotion Communication in Speech Prosody: The Role of Culture and Language Tone**

Abstract: Despite decades of research, the influence of cultural and linguistic diversity on emotional prosody remains incompletely understood. The present work examined how historical heterogeneity and language tone shape emotional prosody recognition across two studies. In Study 1, a reanalysis of 46 studies spanning 43 cultures revealed that emotional prosody from historically heterogeneous cultures was more accurately recognized by individuals from different cultural backgrounds than that from homogeneous cultures. Moreover, speakers of tonal languages demonstrated higher recognition accuracy compared to speakers of non-tonal languages. To further investigate the role of language tone in emotional prosody perception, Study 2 leveraged the diversity of Chinese dialects, which vary in the number of tones. A total of 223 participants fluent in dialects featuring 3 to 10 tones completed an emotional prosody recognition task and assessments of pitch, intensity, and duration sensitivity. The results showed that the number of dialect tones positively predicted emotion recognition accuracy, an effect fully mediated by sensitivity to intensity but not by pitch or duration. Collectively, these findings highlight the intertwined roles of culture and language in emotional prosody communication, underscoring the need to incorporate greater cultural and linguistic diversity in future research.

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Communication: **Discussion**

Parallel Session 9 : T2

Session	Parallel Session 1
Track	T1
Time	11:15 - 12:15
Type	Talks
Title	Emotional and Sensory Modality Shift Chair: Xia Fang

Communication: **Pan Zhihe - Emotion Communication in Speech Prosody: The Role of Culture and Language Tone**

Abstract: Despite decades of research, the influence of cultural and linguistic diversity on emotional prosody remains incompletely understood. The present work examined how historical heterogeneity and language tone shape emotional prosody recognition across two studies. In Study 1, a reanalysis of 46 studies spanning 43 cultures revealed that emotional prosody from historically heterogeneous cultures was more accurately recognized by individuals from different cultural backgrounds than that from homogeneous cultures. Moreover, speakers of tonal languages demonstrated higher recognition accuracy compared to speakers of non-tonal languages. To further investigate the role of language tone in emotional prosody perception, Study 2 leveraged the diversity of Chinese dialects, which vary in the number of tones. A total of 223 participants fluent in dialects featuring 3 to 10 tones completed an emotional prosody recognition task and assessments of pitch, intensity, and duration sensitivity. The results showed that the number of dialect tones positively predicted emotion recognition accuracy, an effect fully mediated by sensitivity to intensity but not by pitch or duration. Collectively, these findings highlight the intertwined roles of culture and language in emotional prosody communication, underscoring the need to incorporate greater cultural and linguistic diversity in future research.

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Abstract: Do fine-grained affective experiences that go beyond broad affective dimensions (e.g., affective valence, arousal) or discrete emotions (e.g., happiness, sadness, fear) emerge as a result of reflective processing, or can they, despite their complexity, emerge as a result of “automatic” processing? The present study investigated whether complex and finely differentiated affective experiences evoked by music can arise spontaneously and involuntarily. Specifically, we focused on nine specific affective feelings that have been associated with music in self-report measures (e.g., feeling dreamy, serene, or heroic; Cowen et al., 2020), and we presented short (2000-2800 ms long) snippets of music that, according to self-report, predominantly evoke one of the nine feelings. Indirect processing conditions were realized in an affect misattribution procedure (e.g., Payne & Lundberg, 2014). In this task, the music snippets were presented as primes shortly before ambiguous targets, that is, abstract paintings that were previously rated as neutral in terms of valence and arousal. The task of the participants (N = 59) was to categorize the feeling evoked by the ambiguous pictures while ignoring the preceding primes. We calculated misattribution scores, which reflect biased responses towards the feeling associated with the task-irrelevant music. The results showed that the feelings associated with the music significantly biased the responses to the targets; significant misattribution effects emerged for all nine specific feelings. Responses in this procedure occurred when the music snippets were presented briefly and they were task-irrelevant. Thus, the music-induced affective experiences emerged spontaneously and under indirect processing conditions. Beyond the conceptualization of fine-grained affective experiences, our results may contribute to an understanding of the underlying processes of how such affective experiences might emerge. References Cowen, A. S., Fang, X., Sauter, D., & Keltner, D. (2020). What music makes us feel: At least 13 dimensions organize subjective experiences associated with music across different cultures. *Proceedings of the National Academy of Sciences*, 117(4), 1924–1934. <https://doi.org/10.1073/pnas.1910704117> Payne, K., & Lundberg, K. (2014). The Affect Misattribution Procedure: Ten Years of Evidence on Reliability, Validity, and Mechanisms: Affect Misattribution Procedure. *Social and Personality Psychology Compass*, 8(12), 672–686. <https://doi.org/10.1111/spc3.12148>

Communication: **Bell Meir Argaman - Social Context Shapes Facial Synchronization - A Virtual Reality Study**

Abstract: Facial synchronization is a key mechanism in social bonding, yet the role of social context remains underexplored. The current study employed a novel Virtual Reality (VR) paradigm to examine how relationship context (friends vs. strangers) influences facial activation and synchronization. By employing a controlled VR setting, this study overcomes key limitations of naturalistic paradigms, including reciprocal and task-driven synchronization effects. Participants (n= 107) were invited to a VR environment with a friend (n=52) or a stranger (n=55). They

were told that they were viewing the live facial expressions of their partner, while they are listening together to short audio clips. In reality, all participants were presented with identical pre-recorded avatar expressions, ensuring experimental control and eliminating reciprocal influences. Post-experiment, participants rated the avatars' realism, confirming they believed the avatars reflected their partner's expressions. Results show greater activation ($t(95) = 2.602$, $p = .011$) and synchronization ($t(103) = 2.76$, $p = 0.007$) of friends participants (vs strangers). Moreover, although enjoyment ratings did not differ significantly between groups, we found that the more participants were synched with the avatar, the more they enjoyed the audio clip ($t(105) = 4.277$, $p < .001$). These findings provide robust evidence that relationship context causally influences facial activation and synchronization. They further highlight the dynamic interplay between social context and non-verbal communication, offering insights with potential applications in social and clinical interventions.

Communication: **Discussion**

Parallel Session 9 : T3

Session	Parallel Session 1
Track	T1
Time	11:15 - 12:15
Type	Talks
Title	Emotional and Sensory Modality Shift Chair: Xia Fang

Communication: **Pan Zhihe - Emotion Communication in Speech Prosody: The Role of Culture and Language Tone**

Abstract: Despite decades of research, the influence of cultural and linguistic diversity on emotional prosody remains incompletely understood. The present work examined how historical heterogeneity and language tone shape emotional prosody recognition across two studies. In Study 1, a reanalysis of 46 studies spanning 43 cultures revealed that emotional prosody from historically heterogeneous cultures was more accurately recognized by individuals from different cultural backgrounds than that from homogeneous cultures. Moreover, speakers of tonal languages demonstrated higher recognition accuracy compared to speakers of non-tonal languages. To further investigate the role of language tone in emotional prosody perception, Study 2 leveraged the diversity of Chinese dialects, which vary in the number of tones. A total of 223 participants fluent in dialects featuring 3 to 10 tones completed an emotional prosody recognition task and assessments of pitch, intensity, and duration sensitivity. The results showed that the number of dialect tones positively predicted emotion recognition accuracy, an effect fully mediated by sensitivity to intensity but not by pitch or duration. Collectively, these findings highlight the intertwined roles of culture and language in emotional prosody communication, underscoring the need to incorporate greater cultural and linguistic diversity in future research.

Communication: **Fang Xia - Bimodal Emotion Decoding: When Faces and Voices Diverge**

Abstract: Emotions are conveyed through facial expressions and vocal tones, but how do observers perceive overall emotion when these channels conflict? This research systematically investigated how individuals decode emotions in three representative incongruent pairings: anger-happiness, happiness-sadness, and anger-sadness. Across six preregistered experiments (N = 359), both multidimensional ratings and open-ended responses were collected to enable a comprehensive and nuanced examination of how conflicting emotional cues are integrated. The results showed a robust facial dominance effect in anger-happiness pairings, with participants primarily relying on facial cues to interpret emotion. In contrast, vocal cues became more dominant in shaping the emotional perception in anger-sadness pairings. The happiness-sadness pairing displayed a more complex pattern, as participants either perceived an alternative emotion or a blend of emotions. To explain these patterns, we proposed and tested the emotion similarity hypothesis, which suggests that the morphological and acoustic

similarities between emotional expressions facilitate the integration of facial and vocal cues into a unified emotional perception. These findings provide valuable insights into how conflicting emotional cues are resolved and offer a refined framework for studying bimodal emotion perception across contexts.

Communication: **Folyi Timea - Fine-grained affective experiences can occur spontaneously and involuntarily: Nine different types of affective feelings indirectly evoked by music**

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were told that they were viewing the live facial expressions of their partner, while they are listening together to short audio clips. In reality, all participants were presented with identical pre-recorded avatar expressions, ensuring experimental control and eliminating reciprocal influences. Post-experiment, participants rated the avatars' realism, confirming they believed the avatars reflected their partner's expressions. Results show greater activation ($t(95) = 2.602$, $p = .011$) and synchronization ($t(103) = 2.76$, $p = 0.007$) of friends participants (vs strangers). Moreover, although enjoyment ratings did not differ significantly between groups, we found that the more participants were synched with the avatar, the more they enjoyed the audio clip ($t(105) = 4.277$, $p < .001$). These findings provide robust evidence that relationship context causally influences facial activation and synchronization. They further highlight the dynamic interplay between social context and non-verbal communication, offering insights with potential applications in social and clinical interventions.

Communication: **Discussion**

Parallel Session 9 : T4

Session	Parallel Session 1
Track	T1
Time	11:15 - 12:15
Type	Talks
Title	Emotional and Sensory Modality Shift Chair: Xia Fang

Communication: **Pan Zhihe - Emotion Communication in Speech Prosody: The Role of Culture and Language Tone**

Abstract: Despite decades of research, the influence of cultural and linguistic diversity on emotional prosody remains incompletely understood. The present work examined how historical heterogeneity and language tone shape emotional prosody recognition across two studies. In Study 1, a reanalysis of 46 studies spanning 43 cultures revealed that emotional prosody from historically heterogeneous cultures was more accurately recognized by individuals from different cultural backgrounds than that from homogeneous cultures. Moreover, speakers of tonal languages demonstrated higher recognition accuracy compared to speakers of non-tonal languages. To further investigate the role of language tone in emotional prosody perception, Study 2 leveraged the diversity of Chinese dialects, which vary in the number of tones. A total of 223 participants fluent in dialects featuring 3 to 10 tones completed an emotional prosody recognition task and assessments of pitch, intensity, and duration sensitivity. The results showed that the number of dialect tones positively predicted emotion recognition accuracy, an effect fully mediated by sensitivity to intensity but not by pitch or duration. Collectively, these findings highlight the intertwined roles of culture and language in emotional prosody communication, underscoring the need to incorporate greater cultural and linguistic diversity in future research.

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Abstract: Emotions are conveyed through facial expressions and vocal tones, but how do observers perceive overall emotion when these channels conflict? This research systematically investigated how individuals decode emotions in three representative incongruent pairings: anger-happiness, happiness-sadness, and anger-sadness. Across six preregistered experiments (N = 359), both multidimensional ratings and open-ended responses were collected to enable a comprehensive and nuanced examination of how conflicting emotional cues are integrated. The results showed a robust facial dominance effect in anger-happiness pairings, with participants primarily relying on facial cues to interpret emotion. In contrast, vocal cues became more dominant in shaping the emotional perception in anger-sadness pairings. The happiness-sadness pairing displayed a more complex pattern, as participants either perceived an alternative emotion or a blend of emotions. To explain these patterns, we proposed and tested the emotion similarity hypothesis, which suggests that the morphological and acoustic

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Communication: **Discussion**

Parallel Session 9 : T5

Session	Parallel Session 1
Track	T1
Time	11:15 - 12:15
Type	Talks
Title	Emotional and Sensory Modality Shift Chair: Xia Fang

Communication: **Pan Zhihe - Emotion Communication in Speech Prosody: The Role of Culture and Language Tone**

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Communication: **Discussion**

Poster Abstracts

Title: The Role of Integrative Emotion Regulation on Psychological Well-being: A Self-Determination Theory Perspective

Authors: Ataman Aslihan

Abstract: Given the well-established link between emotion regulation (ER) and mental health, adaptive ER processes are one of the fundamental areas of investigation in the clinical field. In this context, very recently, the concept of integrative emotion regulation (IER), which represents an open and accepting attitude towards emotional experiences and utilization of these experiences to guide behavior (Roth et al., 2019), has been proposed as an adaptive ER mode, grounded in Self-Determination Theory's organismic metatheory (SDT; Deci & Ryan, 2012). However, research on IER is still in its infancy and, to our knowledge, there is no such study, especially in a Turkish sample. Therefore, the aim of this research was to investigate the role of IER offered by SDT on a Turkish adult sample. Specifically, the research examined the relationship between IER and psychological well-being and the role of basic psychological needs satisfaction, namely autonomy, competence, and relatedness satisfaction, on this relationship as proposed by the SDT perspective. 250 participants completed an online survey including a demographic information form and questionnaires assessing the study variables. Pearson's correlation was used to examine correlations between variables of interest. Mediation analyses were performed using Jamovi's medmod module based on bootstrapping with 1000 bias-corrected and accelerated resamples. The findings indicated that IER use was positively correlated with psychological well-being, satisfaction of autonomy, competence and relatedness, and negatively correlated with depressive symptoms. Mediation analysis demonstrated that autonomy satisfaction fully mediated, while competence satisfaction partially mediated the association between IER and psychological well-being. Relatedness satisfaction was not found to have a mediator role. The findings support the adaptive role of IER on psychological health and the role of psychological need satisfaction as an underlying mechanism between ER processes and psychological health.

Title: Exploring Interpersonal Emotion Regulation Strategies in Parents of Children with Neurodevelopmental Conditions: A Qualitative Analysis

Authors: Ahmad Sam, Cai Ru Ying, Prosetzky Ingolf, Uljarevic Mirko, Zurbriggen Carmen, Gross James, Samson Andrea

Abstract: Emotion regulation (ER) is essential for mental health and well-being, yet individuals with neurodevelopmental conditions (NDCs) face unique challenges in this domain. Many individuals with NDCs require lifelong caregiver support for ER, emphasizing the importance of interpersonal ER strategies. Identifying effective interpersonal ER strategies is crucial for improving support systems, enhancing parent-child relationships, and fostering emotional development in children with NDCs. Further, gaining insights into the profiles of interpersonal ER strategies can inform family interventions and educational practices, providing tools to navigate the challenges of co-regulating a neurodivergent child. Unfortunately, despite its significance, little is known about the strategies caregivers use or their effectiveness, particularly across diverse NDCs. This study addresses this important gap and provide a comprehensive characterization of caregivers' interpersonal ER practices by employing a participatory framework. Guided by a parent advisory committee, the study ensures inclusivity and relevance. Parents will contribute to refining the research design, ensuring cultural and contextual alignment with

their lived experiences. Identifying effective interpersonal ER strategies is crucial for improving support systems, enhancing parent-child relationships, and fostering emotional development in children with NDCs. These findings could inform family interventions and educational practices, providing tools to navigate the challenges of co-regulating a neurodivergent child. We used a participatory qualitative approach, integrating focus groups and semi-structured individual interviews with parents of children aged 7–17 years. Focus groups will explore shared challenges and common interpersonal ER strategies, while individual interviews will provide detailed insights into the contextual factors influencing ER strategy effectiveness and frequency. All data will undergo reflexive thematic analysis using the six-phase framework of Braun and Clarke (2006). Themes will be coded into themes and subthemes to identify patterns, with additional team discussions to ensure rigor and minimize bias. The preliminary results of the focus group and a few individual interviews will be presented through visual data graphs generated with Atlas software. By exploring interpersonal ER strategies through focus groups and individual interviews, this study bridges knowledge gaps, offering evidence-based solutions to support families and improve outcomes for children with NDCs.

Title: Emotion Regulation of Envy: The Role of Suppression and Cognitive Reappraisal

Authors: Prikhidko Alena, Kushnerenko Dmitry, Qiu Yuxi

Abstract: Envy creates a confusing mixture of feelings toward people one sees as doing better in life in a way resembling internal conflict, which might lead to stress because envious people often do not realize that they experience envy. Some may suppress their emotions and show up in active or passive aggression toward the object of envy. Currently, there is scarce research on the emotion regulation of envy. Meanwhile, studies show that this emotion is tied to anxiety, resentment, depression, and anger. We surveyed 723 college students from an Urban, predominately Hispanic institution using Depression Anxiety and Stress Scales (DASS 42; Lovibond & Lovibond, 1995), The Benign and Malicious Envy Scale (BEMAS; Lange & Crusius, 2015), and Emotion Regulation Questionnaire (Gross & John, 2003) and found that cognitive reappraisal is negatively correlated to malicious envy. However, when people see displays of wealth and use cognitive reappraisal to change their thoughts, they become inspired rather than stressed. Stress, depression, and anxiety correlate with suppression of emotions, and suppression has a high correlation with malicious envy. The moderation effect of suppression on the relationship between malicious envy and depression differs between individuals with a religion and those without. Specifically, on average, the impact of suppression on the relationship between malicious envy and depression is more substantial for religious groups. Additionally, among people with the same level of suppression, those who have higher scores on benign envy tend to score less on stress and depression. Further studies are needed to understand the effect of various emotion regulation strategies on the relationship between envy and stress, anxiety, and depression.

Title: Investigating the Relationship between Social Anxiety and Face Perception

Authors: Liu Shengtong, Elliott Rebecca, Lander Karen

Abstract: Social anxiety, where people often avoid looking at faces in social situations, may be one of the reasons contributing to individual differences in face perception. Thus, the reported study

explores how social anxiety relates to both facial identity and facial expression recognition ability in the same individual. Participants ($n = 144$) were recruited from the University of Manchester and via Prolific. The online experiment included the Social Interaction Anxiety Scale (SIAS), State-Trait Anxiety Inventory (STAI), Beck Depression Inventory (BDI), and face recognition tasks including the Cambridge Face Memory Test (CFMT), Glasgow Face Matching Test (GFMT) and a facial expression recognition test (dynamic faces). A significant negative correlation was observed between social anxiety and facial identity recognition ($r = -0.226$, $n = 144$, $p = 0.006$). However, no significant relationship was found between social anxiety and facial expression recognition ($\rho = -0.04$, $n = 144$, $p = 0.628$). Participants were divided into a low social anxiety group ($n = 77$) and a high social anxiety group ($n = 67$) based on the SIAS cutoff score of 36. In both groups, fear was the least accurately recognised emotion at low intensity (low social anxiety: mean = 1.39; high social anxiety: mean = 1.27) and high intensity (low social anxiety: mean = 2.56; high social anxiety: mean = 2.69) on a 4-point scale. In addition, according to categorisation biases, social anxiety levels was correlated with miscategorising surprise as sadness, anger as fear, and fear as disgust among low-intensity facial expressions. Our findings indicate that participants with higher levels of social anxiety are more likely to exhibit impairments in recognising facial identity compared to facial expressions. Additionally, they demonstrate difficulties in recognising fear specifically.

Title: **Exploring the Role of Emotion Intensity and Background on Face Emotion Recognition**

Authors: **Peng Yuanyi, Lander Karen, Kafkas Alex**

Abstract: The extent to which faces and background influence emotion recognition remains unclear. Previous studies have focused exclusively on the significance of either the face or the background but have overlooked the role of emotion intensity (how strongly the emotion is expressed). Hence, this research aims to systematically investigate the role of emotion intensity (on face and/or background) on facial emotion recognition. We hypothesised that the relative contribution of face and background on emotion recognition fluctuates depending on emotion intensity. In Experiment 1, 103 participants were recruited online to identify happy, sad, and neutral facial expressions presented within positive, negative, and neutral backgrounds. Happy and sad faces were morphed to depict both high and low-intensity levels. Participants rated face emotion from -4 (strongly sad) to 4 (strongly happy). Results showed that background influenced emotion recognition when the face was ambiguous (i.e., low intensity). However, as face intensity increased, it became the dominant factor, diminishing the background's influence. Experiment 2 employed eye-tracking to examine mechanisms involved in face emotion recognition, while intensity and type of background varied. Background stimuli were static or dynamic (movies) in a between-participants design. As in Experiment 1, participants in Experiment 2 viewed backgrounds and then faces superimposed onto the background. They were asked to rate face emotions on a scale from -4 (strongly sad) to 4 (strongly happy). Preliminary analyses from Experiment 2 showed that intensity and type of background also affected gaze scan paths within facial regions, supporting and extending the behavioural effects from Experiment 1. Overall, the findings indicate that background intensity and type play an important role in face emotional recognition. Faces with low emotional intensity rely more on background for accurate emotion recognition, a reliance that is heightened in dynamic backgrounds.

Title: Facial Mimicry Predicts Emotion Recognition Capacity

Authors: Amihai Liron, Maer Shachar, Yeshurun Yaara

Abstract: People tend to automatically mimic one another's facial expressions - a phenomenon known as facial mimicry, widely regarded as important for understanding others' emotions. Although its importance is well documented, there has been little exploration of whether individuals' capacity to mimic predicts their capacity for emotion recognition. To test this, thirty-five participants completed three emotion recognition tasks: (i) a facial expression and emotion word congruency task; (ii) a slow-motion facial expression video task in which participants paused once they recognized the emotion; and (iii) Film task - a complex emotion-matching task. Moreover, participants took part in a mimicry task in which they were instructed to mimic actors in four short videos displaying various facial expressions. Using a cutting-edge neural network-based method we developed to quantify synchronization, we found that accuracy and speed in mimicry each predict emotion recognition outcomes. There was a positive correlation with accuracy, such that participants that were more accurate in the synchronization task had a higher emotion recognition score. Interestingly, and counterintuitively, participants who were slower in their mimicry responses achieved higher emotion recognition scores. Remarkably, this relationship appears task independent, underscoring the robust connection between deliberate facial mimicry and the ability to recognize others' emotions. These results are novel as they show for the first time generalizability of synchronization capacity - that one's ability to accurately mimic other people's facial expressions in a deliberate synchronization task is associated with their ability to recognize emotions in separate emotional recognition tasks. Moreover, they suggest that in individuals who are good at recognizing other people's emotions, higher cognitive process may take place before actual mimicry (as reflected in slower mimicry response). Taken together, our results suggest that individual differences in mimicry capacity relate to individual differences in emotion recognition.

Title: Mindfulness and Its Correlation with Youth Mental Health

Authors: Wasylkowska Maria, Kobylńska Dorota, Holas Paweł, Mituniewicz Julian, Robak Natalia

Abstract: Mindfulness-based interventions for adolescents have recently become popular worldwide. Research shows they have positive effects on both mental and physical health. The present study aims to demonstrate the correlation between mindfulness and few of the most important factors of adolescent development. Mindfulness practice is considered emotionally, socially and academically beneficial for adolescents fostering lasting improvements in well-being, emotion regulation, anxiety and self-compassion. Number of interventions and research on mindfulness are rapidly increasing, therefore there is a need for more studies showing what an important role mindfulness plays in everyday life. This study examined the correlation between mindfulness and mental health symptoms, emotion regulation difficulties, anxiety, well-being and self-compassion within a sample of Polish adolescents aged 12 to 15 years (N = 122). The following tools were used in the study: Child and Adolescent Mindfulness Measure (CAMM), General Health Questionnaire (GHQ-12), Difficulties in Emotion Regulation Scale (DERS-SF), State-Trait Anxiety Inventory for Children (STAIC), Warwick Edinburgh Mental Well Being (WEMBWS),

Self-Compassion Scale for Youth (SCS-Y SF). Overall, the results show that mindfulness negatively correlates with mental health symptoms, difficulties with emotion regulation and state anxiety, while positively correlating with well-being and self-compassion.

Title: **The Language of Emotion and Identity in Emergencies**

Authors: **Murphy Madeline**

Abstract: Research aimed to compare language used in emergencies to normal conversations, with particular interest in social identity markers and emotion use. Natural language data was gathered from footage of emergencies and analysed in terms of emotion and social identity theory. The data were split into 3 groups- 'zero' responders interacting with each other, 'zero' and first responders talking, and first responders speaking amongst themselves. Analysis using the Linguistic Inquiry and Word Count (LIWC)-22 software produced percentage frequencies of the use of key words relating to emotion and social identity. These frequencies were then compared to the average frequencies of word use according to LIWC's test kitchen corpus of everyday conversations using Cohen's d analyses. Findings suggest use of emotional and social identity related words differ significantly between emergency situations and everyday language, and to differing degrees depending on the combination of 'zero' and first responders involved in the interaction. Results support existing literature regarding increased levels of social identification in emergency situations compared to everyday life. They also present insights into how emotionality is different in emergencies compared to normal life, and how this may relate to social identity.

Title: **Processing negative stimuli and beyond: Emotional dynamics in at-risk individuals with independent or co-occurring anxiety and depression symptoms**

Authors: **Rendes Réka, Lang Diana Agnes, Varkonyi Gergo, Deak Anita**

Abstract: The emotional correlates of anxiety and depression have been extensively studied due to their substantial overlap. While a growing body of research has explored their relationship with affective processes, there is limited research on how co-occurring symptoms interact with emotional dynamics at subclinical level. Drawing from recent empirical findings on the core components within the anxiety-depression symptom network, we propose an expanded tripartite model, incorporating perceived control alongside positive (PA) and negative affect (NA). We hypothesized that subclinical anxiety and depression symptom severity and co-occurrence would influence the experience of NA, PA, and the level of perceived control across several emotional episodes, not limited to those elicited by negative stimuli. The objective of the present study is to examine the differences in consecutive phases of an emotion induction task between low risk, depression risk, anxiety risk and comorbid risk groups. A sample of 284 individuals without diagnosed psychiatric disorders were presented movie clips to elicit neutral, negative and positive emotions. We inserted a recovery period to assess how participants would return to an emotional equilibrium after negative stimuli. Participants rated their emotional experience and perceived control at baseline and after each stimulus using PANAS. Our findings indicated that participants with anxiety, depression, or comorbid risk differed in NA, PA and perceived control measured at baseline and after recovery with the largest differences between the low risk and comorbid risk groups. The results also show that NA, PA and perceived control during emotional

episodes successfully predict the inclusion in low and high-risk groups presenting independent or co-occurring symptoms. By highlighting the patterns between emotional dynamics and affective symptoms, this study offers a valuable insight on how laboratory experiments could be of great importance in detecting at-risk individuals for anxiety, depression and co-occurring symptoms.

Title: **Attentional Bias to Positive and Negative Stimuli: The Role of Intrinsic and Motivational Relevance**

Authors: **Boğa Merve, Koyuncu Mehmet**

Abstract: Many studies have shown that negative stimuli – especially for threat-related content—are prioritised in the visual field compared to neutral stimuli. More recently, research on emotional attention has increasingly focused on the effects of positive stimuli. In the present study, attentional biases for negative (threat, disgust) and positive stimuli (romantic couple/baby face, food) were examined across three experiments using three different methods: spatial cueing task (Exp 1), dot probe task (Exp 2), and eye-tracking method (Exp 3). We also aimed to investigate the effects of motivational relevance on attention by manipulating participants' hunger state, in addition to examining intrinsic relevance of stimuli. In the first two experiments, an attentional bias was found for threat-related stimuli, whereas no attentional advantage was observed for stimuli with positive content. In the final experiment, results from the eye-tracking study revealed attentional biases toward both positive and negative stimuli in both early (initial orientation) and later (disengagement) stages of attention. However, disgust stimuli had enhanced attentional advantage compared to other emotional content in the both components of attention. The effects of motivational processes on attention—specifically, attention bias to food stimuli in hungry participants—were only observed in later attentional mechanisms. Overall, the results seem to support the relevance hypothesis; however, the disgust advantage in attention needs to be discussed in detail.

Title: **How do Achievement Goals Relate to Daily Personal Goal Pursuit? Emotion Regulation's Mediating Role**

Authors: **Katz-Vago Inbar, Benita Moti**

Abstract: Background: When striving to attain their academic goals, students often experience setbacks that elicit negative emotions. Recent research reveals that the emotion regulation strategy of emotional integration (i.e., volitional exploration of emotions as they arise) predicts goal progress, while emotional suppression (i.e., efforts to hide or ignore emotions) negatively predicts these outcomes. However, little is known about the antecedents of these distinct emotion regulation strategies. Aim: This research proposes that the type of overarching goal students endorse dictates the type of emotion regulation strategies they use during goal striving. Specifically, it explores whether mastery and performance goals predict different emotion regulation strategies when navigating setbacks, ultimately affecting their goal attainment, well-being, progress, and effort. Method: Study 1 (daily diary) involved 366 American undergraduates, and Study 2 (experience sampling) included 187 Israeli undergraduates, all preparing for an exam. Both studies included baseline questionnaires on achievement goals and daily reports on goal progress, effort, well-being, and emotion regulation. Results: In Study 1, cross-level mediation analysis demonstrated that global performance goals were associated with daily emotional

dysregulation, which in turn predicted reduced goal effort, decreased progress, and heightened depressed mood. Conversely, global mastery goals were linked to daily emotional integration, predicting increased goal effort, enhanced progress, and lower levels of depressed mood. Study 2, using multi-level modeling, revealed that morning performance goals predicted mid-day emotional dysregulation, which subsequently led to diminished daily progress and an elevated depressed mood. Additionally, global performance goals were found to predict mid-day emotional suppression, which was associated with increased depressed mood. In contrast, morning mastery-approach goals predicted mid-day emotional integration, which in turn predicted effort and progress toward the goal and less depressed mood. Conclusion: Mastery goals predicted emotional integration and positive goal outcomes, while performance goals predicted emotional dysregulation, suppression, and poorer outcomes, including increased depressed mood.

Title: Is male sexual arousal an emotional state indexed by pre-attentional tendencies toward erotic pictures?

Authors: Silva Samuel, Rosa Pedro J., Joana Carvalho

Abstract: Background: Early conceptualizations of sexual arousal considered it an emotional response state prompted by exposure to erotic cues. The saliency effect of erotic cues was expected to be detected at the pre-attentional level of information processing, signaling human tendencies toward reproduction. Such an effect has been tested mainly in men, but studies reveal inconsistent result patterns across samples and methodologies. Aim and Methods: This study aimed to contribute to this research frame by testing the effects of three exposure conditions: (1) erotic images (male and female nudes); (2) non-erotic images (dressed men and women); and (3) neutral/objects images through a breaking continuous flash suppression task (b-CFS), in men. The b-CFS is a task aimed at capturing pre-attentional tendencies toward stimuli, hinting on their emotional saliency. Forty-seven cis-gender, heterosexual men participated in this study and were assigned to all exposure conditions. Results: After applying a Linear Mixed Model approach and controlling for low-level features of stimuli, findings revealed no main effects of exposure conditions on pre-attentional tendencies, i.e., reaction times toward the detection of stimuli. Additionally, Pearson's correlations showed no significant associations between reaction times toward the detection of erotic cues (nudes) and men's sexual excitation and sexual inhibition propensities. Conclusion: Contrary to theoretical expectations, men's pre-attentional responses captured by a b-CFS task did not support the emotional saliency effect often attributed to erotic cues. Findings align with empirical data challenging existing theoretical assumptions regarding automatic appraisal of sexual cues, pointing to the complexities underpinning the onset, maintenance, and function of sexual arousal in men.

Title: Human Values Elicit Negative Feelings And Therefore Ambivalence.

Authors: Maslamani Aysheh, Kanfo-Noam Ariel, Maio Greg, Mayo Ruth

Abstract: Values are abstract ideals that serve as guiding principles in one's life. As inherently positive and desirable concepts, values are seen as motivators for actions and behaviors. However, research has largely ignored the possibility that values may elicit negative feelings despite being explicitly important to us. In the current study we aim to examine this possibility. Across two studies, 800 hundred participants over 18 years ($M=41.6, SD=13.7$) from the UK

completed a questionnaire in which they were asked to indicate their level of positive/negative feelings towards a comprehensive list of values and then report the importance of these values to them. The results support our argument by showing that people can have negative feelings towards their values and that people can feel both positive and negative emotions towards their values simultaneously, which means feeling ambivalence. By using a mixed-effect model, our results revealed that less ambivalence values predicted higher ratings for value importance. This research contributes to the field of values on multiple levels. Theoretically, it will uncover new insights about values, such as the existence of negative emotions towards them, the presence of ambivalence towards values. These findings may inspire future studies to explore the effects of ambivalence on people's well-being, behaviors, cognition, and their affect.

Title: **Cultural Differences in Beliefs about Emotions, Everyday Emotion Regulation and Affect Changes between UK and China**

Authors: **Ge Yiran**

Abstract: Emotion beliefs shape individuals' motivation to regulate emotional experience, and cultural context influences how emotions are understood. Our previous cross-sectional study found that controllability belief predicted regulation strategy use at all four stages of Gross's (1998) process model, while usefulness and acceptability beliefs were only associated with use of suppression. Some of these associations were stronger for either Chinese or UK participants. The present study attempted to replicate these results using a 15-day daily diary study, rather than cross-sectional data. British (N = 80) and Chinese (N = 88) participants provided 2453 valid responses. We assessed how emotions beliefs affected the use of six strategies (situation modification, avoidance distraction, rumination, cognitive reappraisal, suppression) and their impact on daily affect. We also tested the association between regulation flexibility and affect. Chinese participants reported stronger emotion beliefs, consistent with prior findings. However, British participants reported more overall emotion regulation than Chinese participants. Chinese participants reported greater use of avoidance, cognitive reappraisal and suppression for positive emotions, while British participants applied these strategies more for negative emotions. Our multilevel models showed that increased daily use of avoidance, distraction, suppression and rumination was associated with heightened negative affect, controlling for previous day's affects. We found cross-lagged effects from previous day's affect and present strategy use, showing that individuals with more negative affects displayed higher level of strategy uses the next day. Results also revealed that greater controllability and acceptability beliefs about negative emotions predicted less variability in negative affect, with Chinese participants reporting stronger effect. Further, cultural differences moderated the association between between-strategy variability on negative affect, suggesting that flexibility in regulation strategy use may be beneficial, particular for Chinese participants. Our findings advance knowledge about the role of emotion beliefs as a motivational factor in emotion regulation and help to explain cultural differences.

Title: **Evidence on female sexual arousal as an emotional state unconsciously triggered by sexual stimuli**

Authors: **Joana Carvalho, Rosa Pedro, Silva Samuel**

Abstract: Background: Sexual arousal has been defined as an emotional state underpinning

sexual response. Information-processing models of sexual response consider that sexual arousal develops from the unconscious appraisal of sexual stimuli and progresses toward stages of overt sexual behavior. Sexual arousal as an emotional state is expected to be indexed by the privileged allocation of pre-attentional/unconscious resources toward sexual stimuli. Yet, evidence of the unconscious appraisal of sexual stimuli in women lacks empirical evidence; the onset of female sexual arousal remains a topic of debate. Aim and Methods: The current study aimed to collect evidence on the unconscious processing of sexual stimuli (male and female nudes), as opposed to non-sexual (dressed male and female characters) and neutral (objects) stimuli, in cisgender, heterosexual women. Forty-seven women performed a breaking continuous flash suppression task (b-CFS); for each stimulus condition (sexual, non-sexual, and neutral condition), its upside-down version allowed the disentangling of the effects of low-level features. Results: Data were analyzed through a Linear Mixed Model approach. Findings revealed that the sexual stimulus condition did not affect pre-attentional responses, as indexed by women's reaction times toward the images. Furthermore, follow-up Pearson's correlations showed that women's reaction times toward sexual cues were not associated with participant's propensity to get sexually aroused or sexually inhibited. Conclusion: In all, despite theoretical assumptions that consider female sexual arousal as an emotional state emerging at the unconscious level of information processing, findings do not support such a claim. Indeed, female sexual arousal likely develops through a complex chain of psychosocial events, being shaped by a series of learning and socializing processes.

Title: **Behavioural and neurophysiological correlates of enhanced L2 emotional vocabulary through targeted instruction**

Authors: **Bermúdez Margaretto Beatriz, Pérez García Elisa, Trujillo Trujillo Cristian Camilo, Fernández Ángel, Sánchez Manzano María Jesús**

Abstract: Foreign languages are often learned in formal and restricted contexts, which can limit the emotional resonance of vocabulary in the second language (L2). This phenomenon, referred to as "disembodied L2," likely affects the integration, use and pragmatics involved in foreign language communication. The present study sought to investigate behavioural and neurophysiological evidence for this disembodied representation of L2 emotional vocabulary and to examine how specific instructional methods focusing on emotional vocabulary might modulate these responses. A group of 28 Spanish undergraduate students of the Degree of English Studies participated in two classroom-based training sessions focused on emotional English vocabulary. Training sessions consisted of various generative exercises using a set of 36 English words (12 positive, 12 negative, 12 neutral). Before and after the training, participants underwent a lexical decision task in which the 36 trained English words were randomly presented alongside an additional set of 36 non-trained English words and 72 pseudowords. Both behavioural data and electrophysiological activity (via 64-channel EEG) were recorded during the tasks. Linear mixed-effects (LME) modeling revealed a significant training x phase x valence interaction for latency data. Specifically, reaction times were faster in post-training phase compared to pre-training, being such reduction greater for trained than non-trained stimuli and particularly for emotional (positive and negative) than neutral words. Furthermore, accuracy data showed a significant training effect, with trained words exhibiting a higher accuracy rate than non-trained stimuli.

Preliminary ERP data showed differential training effects across positive and negative words at early (~175ms) and late (550ms) time windows, compatible with the modulation of EPN and LPP components, related to emotional processing. These findings demonstrate the effectiveness of targeted instructional methods in enhancing the lexico-semantic representation and processing of L2 emotional vocabulary, highlighting the importance of developing well-designed training programs to promote a more efficient L2 use.

Title: **Odor-evoked affective responses: integrating fMRI, behavioral, olfactory, and psychometric data**

Authors: **Salagnon Mathilde, Delplanque Sylvain, Vuilleumier Patrik, Sander David**

Abstract: Olfaction holds a distinctive position among sensory modalities in eliciting emotions, given its close association with the limbic system and a direct connection between the primary olfactory cortex and the amygdala (Gottfried et al., 2002). Although previous imaging studies in humans have explored representations of affective valence and arousal, these dichotomous dimensions may not capture the richness of odor-evoked emotions. We aim to assess the neural representation of olfactory feelings, using a model with six specific dimensions (i.e., the Geneva Emotion and Odour Scale, GEOS). This tool was designed and validated to collect odor-related emotions, reflecting diverse adaptive functions (Chrea et al., 2009; Delplanque et al., 2012; Ferdenzi et al., 2013). We hypothesise that distinct and unique neural patterns will be associated with each GEOS dimension, providing insight into the functional characterisation of brain processing of odour-elicited feelings, beyond the hedonic dimension. To investigate this, 100 healthy adults were recruited for a functional Magnetic Resonance Imaging (fMRI) study where they were exposed to 50 everyday odors (e.g., foods, products, cosmetics) with varying olfactory profiles. Participants rated each odor using GEOS during scanning, to capture the elicited feelings. Covariates related to individual differences in olfactory perception, emotional abilities, and affective states were collected through pre-scanning subjective questionnaires, including Importance of Olfaction questionnaire (Croy et al., 2009), Clobert Adult Sensitivity Scale (Gauvrit et al., 2023), Rotterdam Emotional Intelligence Scale (Pirsoul et al., 2022), Profile Of Mood States (Fillion & Gagnon, 1999), and the Sniffin' Sticks test to objectively assess olfactory function. Data collection and analysis are ongoing. By linking brain activity to odor-elicited feelings, subjective and objective measures of olfactory perception, emotional abilities, and affective states, this study aims to provide a comprehensive understanding of how the brain encodes affective responses to odors and how these representations may vary across individuals.

Title: **How does thinking more positively change our brain?**

Authors: **Shi Chunyan, Wirsich Jonathan, Chen Zile, Vuilleumier Patrik**

Abstract: Reappraisal is an intentional attempt to change emotion through reconstrual or repurposing. Previous studies revealed that using reappraisal to decrease negative emotion will induce a reduction in late positive potential (LPP) amplitudes, a decrease in amygdala activity, increases in frontal theta oscillations and relative left frontal activity. However, most existing studies focus on manipulating regulation goals rather than manipulating different reappraisal tactics. In our study, we want to reveal the differences between positive reappraisal (reinterpret the cause, outcome and consequence in a more positive way) and less negative reappraisal

(reinterpret in a less negative way). Seventeen university students with healthy mental states were recruited to perform an emotion regulation task, in which they need to watch or reappraise the emotion that are triggered by the pictures (40 neutral and 120 negative, from the Nencki Affective Picture System) according to the instructions. After each picture, they rated on positive emotion, negative emotion and arousal scales. At the same time, brain oscillations were measured using a 64-channel electroencephalography system and skin conductance level was measured with Biopack system. Results indicated that both positive reappraisal and less negative reappraisal reduced arousal, negative emotion and increased positive emotion. Less negative reappraisal is more effective in decreasing arousal level and negative emotion than positive reappraisal. Although positive reappraisal and less negative reappraisal seem to have a difference in early ERP components in frontal areas, and a difference in early LPP in parietal areas. There is a time lag between when the trigger was recorded and when the picture was presented the screen, therefore, we need to calibrate for each trial each participant in ERP analysis. The experiment and analysis is still ongoing, we are looking forward to the following results.

Title: **Religious-Dependent Neural Synchronization**

Authors: **Zvi Yohay, Kerem Nitai, Yeshurun Yaara**

Abstract: Emotions play a significant role in how individuals process and interpret their surroundings. When individuals share similar emotional experiences, they tend to exhibit synchronized neural responses, reflecting shared understanding. This study examines how emotional processing related to religious-sensitive content influences neural synchronization, particularly across different religious affiliations. We recruited 62 participants and divided them into three groups based on their religiosity: Religious, Secular, and Ex-Religious (ExRe). While undergoing functional Magnetic Resonance Imaging (fMRI), participants watched videos containing both religiously sensitive and neutral content. Additionally, participants filled a questionnaire referring to the explicit emotions elicited by each video. The results revealed higher in-group neural synchronization within the Religious group, particularly in the Default, Control, Attention, and Somatomotor networks, suggesting a deeper emotional resonance and shared understanding of the narratives. Interestingly, although the ExRe group reported similar emotional responses to the Secular, they exhibited stronger neural synchronization with the Religious group, including regions related to emotional processing. This finding suggests that early-life religious experiences continue to influence emotional processing and neural responses, even after a significant change in belief system. Overall, these findings suggest that emotional responses to religious content can foster stronger neural synchronization within groups. The study highlights the enduring impact of early socio-cultural environments on emotional and neural processes, providing insights into how shared emotional experiences can shape group identity and neural representations.

Title: **Emotional Vocal Instructions: Task Performance, Neural Processing, and Recognition Accuracy in Different Cultures**

Authors: **Zdanovica Anita, Trinite Baiba, Skilters Jurgis, Nakatani Chie**

Abstract: Affective prosody, which conveys emotions such as anger and happiness through vocal tone, plays a crucial role in communication both within and across cultures. This study examines the effects of affective prosody on response time (RT), accuracy, and neural processing during

a manual joystick movement task, as well as the cross-cultural recognition of affective prosody. In a vocally guided task-performance study, forty-five participants responded to emotionally spoken instructions indicating spatial directions (up, down, left, right) delivered in angry, happy, or neutral tones. The results showed that angry prosody elicited faster RTs compared to neutral and happy instructions, though no significant differences in accuracy were observed, likely due to the task's low cognitive demands. Furthermore, the effect of angry prosody on RT persisted into subsequent neutral trials, highlighting the lasting influence of affective prosody on performance. Additionally, differences between emotional and neutral conditions in ERP components were observed across multiple electrode sites, particularly in late components (ranging from 500–1300 ms post-stimulus presentation). The cross-cultural component of this study explores how emotions expressed in the Latvian language are perceived by individuals from diverse linguistic and cultural backgrounds. Vocal stimuli include words, syllables, and phonemes spoken in angry, happy, and neutral prosody. Students from multiple European countries are participating in an online emotion recognition task, where they listen to each sample and assign an emotional label (angry, happy, sad, surprised, neutral). The inclusion of additional emotional categories allows for the exploration of whether other emotional dimensions emerge and how they vary across cultures. Data collection is currently ongoing to ensure that data will be gathered and analyzed in time for presentation at the conference. These findings contribute to a deeper understanding of how emotional prosody influences behavioral and neural responses during task execution and how cultural background affects emotion recognition.

Title: Prosodic Alignment and Individual's Speech Patterns as Predictors of Social Interaction Quality

Authors: Aviv Eldad, Ravreby Inbal, Yeshurun Yaara

Abstract: Prosodic patterns—acoustic features of speech such as intonation, rhythm, and speaking durations—are fundamental to social interactions, conveying emotions, intentions, and levels of engagement that often transcend the literal meaning of words. This study investigates how individual's prosodic features and dyadic prosodic alignment predict self-assessed interaction quality in first-time social encounters that progressively transitioned from casual to highly intimate discussions. A total of 120 participants, forming 60 same-gender unfamiliar dyads, engaged in the 'Fast Friends' protocol—a structured dialogue designed to foster interpersonal connection by gradually deepening the intimacy between interlocutors. Participants then rated the interaction quality using a set of questions aimed at evaluating their perceived Goodness of Interaction (GOI). Results revealed that an Elastic Net regression model that included prosodic features (e.g., pitch variability, mean pitch, speech rate, and speaking time) explained 28.5% of the variance in GOI scores, identifying individual pitch variability and alignment in pitch variability as the most predictive features. These findings suggest that greater variability in pitch reflects expressiveness and emotional engagement, while alignment in pitch variability signals synchronization and mutual attunement—both critical elements for fostering rapport and connection. In contrast, speech rate and its alignment had negligible effect on GOI scores. These findings highlight the intricate role of prosody in social interactions, demonstrating how individual expressiveness and interpersonal synchronization jointly enhance perceptions of interaction quality. By leveraging machine learning techniques and exploring diverse communicative aspects, our results point to

a fundamental unique role of pitch variability and pitch variability alignment, in social bonding.

Title: **The Effect of Guilt and Shame on Construal Level and Psychological Distance**

Authors: **Marié Vincent, Alexopoulos Théodore**

Abstract: According to Construal Level Theory (CLT; Trope & Liberman, 2010), a stimulus/object can be mentally represented in a more or less abstract way depending on its psychological distance (encompassing the temporal, spatial, social, and hypothetical dimensions). CLT posits a bidirectional link: the farther the stimulus, the more abstract its representation, and vice-versa. Previous research suggests emotions influence construal level, often distinguishing between “basic” and “self-conscious” emotions, assumed to induce low and high construal levels, respectively. However, some theories (e.g., Tracy & Robins, 2004) propose a finer distinction within these categories : taking the case of self-conscious emotions, for example, guilt is linked to the negative evaluation of a specific behavior and should induce a low construal level, while shame is associated with a negative evaluation of the global self and should induce a high construal level. Three pre-registered experiments aimed to replicate Han et al.’s (2014) findings on these emotions’ effects on construal level and extend them to psychological distance. Participants recalled autobiographical episodes (shame vs. control vs. guilt), then completed the Behavior Identification Form (Vallacher & Wegner, 1989) and a psychological distance task (Fiedler et al., 2012, 2015). Study 1 found an effect of guilt, but not shame, on both measures. Studies 2 and 3 failed to replicate this effect. However, a language concreteness index in Study 3 (Brysbaert et al., 2014) suggested an opposite pattern. Complementary analyses of autobiographical recalls from Studies 1 and 2 indicated that guilt may lead to a higher, rather than lower, construal level than a control state. These findings challenge the initial hypotheses but align with CLT predictions.

Title: **Preferred and inferred empathic accuracy strategies between romantic partners**

Authors: **Goldberg Juli, Eyal Tal**

Abstract: Understanding in romantic relationships is vital for well-being, trust, and satisfaction. However, accurately perceiving a partner’s feelings can be challenging. While research suggests that directly asking a partner about their feelings (perspective getting) is the most effective strategy, many believe that imagining oneself in a partner’s shoes (perspective taking) will help, despite that strategy being found to be less effective for accuracy. In our study, we explored the strategies individuals prefer for understanding their partner’s feelings and what they believe their partner uses. We also examined how the discrepancy between these preferences and inferences impacts perceived understanding and relationship satisfaction. Across Studies 1 and 2, we found that individuals favor both perspective-taking and perspective-getting as strategies for their partner to use. However, they often do not perceive their partner as engaging in perspective-taking. This gap was negatively correlated with relationship satisfaction. Study 3 delved into the different motivations behind the preference for each strategy, shedding light on the nuanced dynamics of empathic understanding in relationships.

Title: **Exploration of students’ use and development of emotion skills in biomedical science lab learning**

Authors: **Mura Manuela**

Abstract: Implementing learning activities that equip undergraduate students with social-emotional skills is fundamental to providing a comprehensive education that prepares students to navigate the challenges of academic life and their future careers. Research into the dynamics involved in scientific discovery and the learning of scientific disciplines has largely focused on cognitive aspects. Contrastingly, emotions have been marginalised as detrimental to a logical and analytical approach, and key elements of learning and discovery rooted in the emotional sphere—including motivation, social interactions and creativity—have been overlooked. To understand how emotions are perceived and used as a source of information in a scientific learning setting, we investigated the social-emotional skills that Biomedical Science undergraduate students develop while undertaking a laboratory research module by working in small groups. A qualitative, phenomenological approach was used to explore students' self-reported awareness of emotion in lab settings and their ability to recognise and regulate emotion in themselves and others. Data were collected with a qualitative survey and interviews. Findings suggest that a learning environment that fosters creativity, initiative, agency, and learning from errors—embedded in a context with complex social interactions—promotes the experience of a broad range of emotions and is suitable for embedding social-emotional learning. While working in the lab, students reported experiencing both situated and social emotions, attempted strategies for regulation and used emotion to navigate challenging experiences. Notably, some participants were unaware of the emotional skills they were developing, suggesting that signposting social-emotional learning activities could promote awareness. Important aspects emerging from this research indicate that embedding social-emotional learning effectively in science-based curricula, requires emotional scaffolding from peers and teachers, along with opportunities for iteration and reflection to create a safe space where students can experiment with emotion and refine strategies to develop intra and interpersonal emotion regulation skills.

Title: Subjective valuation from individual decision-making to joint action

Authors: Navare Uma, Belkaid Marwen

Abstract: Individuals choose between available options based on their respective values. Valuation is thus a core affective process involved in decision-making. Crucially, this process is not purely objective but can rather depend on various factors including goals, emotions, and contexts. Recent studies in individual decision-making have captured the subjective aspect of valuation with paradigms manipulating outcome contexts and showing that action values are estimated with respect to potentially achievable outcomes. Yet, the computational mechanisms underlying subjective valuation and how they unfold in joint action contexts remain unclear. In particular, since joint action implies taking partners into account in one's action planning, differences in the partner's available rewards can be expected to affect decision-making. In this work, we will present an experiment investigating value-based decision-making in a collaborative setting. We will also examine whether existing computational models can account for subjective valuation in such joint action contexts. Thus, this study is a first step in understanding how subjective valuation operates in joint action.

Title: Emotions in Intimate Relationships: A Cross-Cultural Perspective on Couples' Emotion Profiles and Partners' Well-being

Authors: **Pirrone Davide, Schouten Anna, Ceulemans Eva, Mesquita Batja, & Verhofstadt Lesley**
NA NA

Title: **Exploring the heterogeneity in depression through an interpersonal lens: The role of value attached to agency and communion**

Authors: **Kalkan-Cengiz Rana B., Verhees Martine, Sels Laura, Kuppens Peter**
NA NA

Title: **Feasibility of a novel open question design to assess dyadic events in daily life: a daily diary study**

Authors: **Carlier Chiara, Kuppens Peter, Ceulemans Eva**
NA NA

Title: **Exploring Emotion Regulation through the Integration of ER Flexibility and ER Skills Models: A Network perspective**

Authors: **Rolland-Carlichi Emma, Baeyens Céline, Bortolon Catherine**

Abstract: Nardelli et al. (2023) proposed a theoretical model of emotion regulation (ER) in which specific ER skills, based on the Berking & Whitley's ACE Model (2014) support different stages of the ER flexibility model (Bonanno & Burton, 2013). However, this remains untested empirically. Thus, for this study, we aim to apply network analysis to identify which ER skills are most strongly associated with and central within the dimensions of ER flexibility (Borsboom, 2017; Fried et al., 2017). Our first objective is to use network analyses to test specific model-based hypotheses. We hypothesize positive associations between context sensitivity and feedback components with the skills of awareness, clarity, and understanding, and between the repertoire component and the skills of modification, acceptance, self-support, and confrontation. We also hypothesize that the feedback dimension will correlate with the modification skill. We also use network analyses to additional, unanticipated findings. Participants recruitment and data collection are in progress. We will conducted Gaussian Graphical Model (GGM; Epskamp et al., 2018) network analyses in R (version 4.4.2) and results will be presented. This approach highlights the importance of integrating ER flexibility and ER skills to deepen our understanding of emotion regulation flexibility and guiding future research and therapeutic interventions combining both ER flexibility and ER skills.

Title: **Is it easier to reduce your sadness or disgust? On the effectiveness of emotion regulation as an effect of strategy used, emotion and HRV**

Authors: **Kobylińska Dorota, Mituniewicz Julian**

Abstract: We investigated how emotion regulation (ER) effectiveness - operationalized via self-report subjective evaluation and electrodermal activity (EDA) - is influenced by the kind of emotion induced (sadness vs. disgust), emotion regulation strategy used (reappraisal vs. distraction vs. acceptance vs. no regulation control condition) and individual dispositions (resting state heart rate variability). In the laboratory experiment, after a training phase, 100 participants were instructed to regulate their emotions before watching negative NAPS photographs. Four blocks

of sad photos and four blocks of disgusting photos were chosen on the basis of former studies. Before each block, the instruction to implement one of the ER strategies was exposed. EDA and HRV were measured. Participants also filled in several questionnaires for assessing their ER abilities, ER flexibility and positive and negative mental health. The results partially confirmed our predictions giving support to a novel ER flexibility framework. Effectiveness of ER differed based on strategy used, regulated emotion and baseline HRV. Sad photographs elicited lower negative emotions than disgusting photographs. The effects of ER strategy used were stronger for regulating disgust. Distraction and reappraisal were more effective than acceptance and no strategy for regulating both sadness and disgust.

Title: Bridging Cognitive Control and Emotion Regulation: New Findings from Meta-Analyses

Authors: Schulze Katrin, Mueller Ilka, Holt Daniel V., Putz Sam, Barnow Sven, Pruessner Luise

Abstract: Emotion regulation is a fundamental aspect of human adaptive functioning, and its connection to cognitive processes has long been of interest. However, the precise nature of the relationship between emotion regulation and cognitive control remains elusive, with a scarcity of systematic reviews and meta-analyses addressing this link. This study fills this research gap by conducting meta-analyses to systematically examine the relationship between individual differences in cognitive control – including the components of inhibition, memory updating, and set-shifting – and four emotion regulation strategies. Data were analysed from 52 studies on reappraisal, 63 on rumination, 30 on suppression, and 21 on worry. Preliminary results revealed a small positive association between reappraisal and cognitive control ($r = 0.13$, 95% CI [0.09, 0.18]) and a small negative correlation between rumination and cognitive control ($r = -0.11$, 95% CI [-0.15, -0.06]). No significant associations were found for suppression ($r = 0.02$, 95% CI [-0.05, 0.08]) or worry ($r = -0.07$, 95% CI [-0.15, 0.01]). Detailed results for specific cognitive control components will be presented. The small observed effects linking cognitive control with reappraisal and rumination suggest a modest relationship. In contrast, the lack of associations with suppression and worry challenges not only the notion of a strong but also a universal connection between emotion regulation and cognitive control—particularly when assessed using abstract tasks measuring inhibition, working memory, and shifting. Our meta-analytic findings offer new insights into the cognitive underpinnings of emotion regulation, highlighting the complexity of this relationship. Future research should investigate the flexibility of emotion regulation across contexts and how cognitive control influences this adaptability.

Title: FEEL the Difference: Concurrent and Prospective Validity of Emotion-Specific Regulation Strategies

Authors: Van Bockstaele Bram, Soenens Bart, Prinzie Peter

Abstract: Emotion regulation plays a crucial role in psychological well-being. The FEEL-E questionnaire differentiates between putatively adaptive and maladaptive emotion regulation strategies across three negative emotions: Anger, fear, and sadness. However, little is known about whether and how these emotion regulation strategies for each emotion differentially predict psychological problems such as aggression, anxiety, and depression. Our study examines the

psychometric properties of the FEEL-E, aiming to (1) determine whether individuals use different emotion regulation strategies depending on the emotion being regulated, and (2) investigate how these strategies uniquely and differentially predict psychological problems. We analysed the correlations between emotion regulation strategies and psychological problems, the factor structure of the FEEL-E, and how factor scores predict concurrent and prospective relationships between emotion regulation strategies and psychological problems. Participants completed the FEEL-E and the Adult Self Report (assessing aggression, anxiety, and depression) in two waves of the Flemish Study on Parenting, Personality, and Development. In wave 1 (N = 350), we found strong positive correlations between emotion regulation strategies for the three emotions, indicating that people do not differentiate between emotions when regulating them. Adaptive strategies were negatively related to all psychological problems, while maladaptive strategies were positively related to all psychological problems. However, emotion-specific regulation strategies were not differentially correlated with aggression, anxiety, or depression. Our analysis of the factor structure and longitudinal data collection (wave 2, current N = 304) is ongoing and will provide further insights into prospective relationships between emotion regulation strategies and psychological problems. While our initial results suggest that maladaptive strategies are broadly associated with increased psychopathology and adaptive strategies with decreased psychopathology, regardless of the emotion being regulated, further analyses will clarify whether emotion-specific strategies offer additional concurrent and prospective value for the prediction of psychological problems.

Title: Emotion recognition in Mild Cognitive Impairment (MCI): The role of face processing and emotional intelligence.

Authors: Mahadevan Rachana, Giesers Naomi, Liman Thomas, Witt Karsten, Hildebrandt Andrea, Roheger Mandy

Abstract: Introduction: Emotion recognition ability is essential for social cognition, enabling humans to interpret and respond to emotion-related cues effectively. However, so far it is not known how underlying cognitive deficits, including face processing, affect emotion recognition, particularly in patients with Mild Cognitive Impairment (MCI). Methods: Sixty participants (patients with MCI = 30, healthy controls (HC) = 30), aged 50-86 years (M= 66.8, SD= 8.66) completed the emotion composite task (ECT), facial composite task (FCT), and emotion stroop task to measure emotion recognition (ER), face processing, and emotional arousal, respectively. Additional cognitive tests and an emotional intelligence (EI) questionnaire were included. Results: Overall, patients with MCI performed about half of a standard deviation worse on ECT as compared with HC ($\beta = -0.47$), however, this effect was not significant. Emotion-specific analysis showed that anger recognition of the patients with MCI was particularly impaired ($\beta = -0.86$). FCT showed a small positive effect on anger recognition ($\beta = 0.28$), indicating that participants with better facial processing skills recognized anger better. Self-control ($\beta = 0.63$), emotionality ($\beta = 0.71$), and sociability ($\beta = 0.46$) predicted ECT, indicating that participants with higher EI performed better in the ER task. Both FCT ($\beta = 0.17$) and EI ($\beta = 0.98$) contributed to the ER performance similarly in HC and MCI. Discussion: While our results did not show significant overall ER performance deficits in patients with MCI, they showed specific impairments in anger recognition. Face processing ability contributed to anger recognition, suggesting that interventions, for example

using ambulatory assessment, could train patients with MCI to maintain their face processing skills, especially for emotions that require more detailed processing, such as anger. Furthermore, emotion regulation training would help patients with MCI focus on real-world emotional cues, thereby improving their emotion recognition abilities.

Title: **Emerging Trends in Anxiety Sensitive Artificial Intelligence**

Authors: **Vanhée Lois**

Abstract: Anxiety, defined as the primary emotional response to uncertainty, is fascinating in its ambivalence, being both a catalyst and an inhibitor of intellectual faculties towards addressing potential, imagined threats. Widely recognized as a significant source of individual suffering—especially in the context of mental well-being issues like depression and self-harm; anxiety also imposes substantial societal costs. These costs, which include ill health and lost productivity, scale to trillions of euros annually. Furthermore, anxiety is deeply political, being both a side effect and an enabler of power imbalances, disproportionately affecting already disadvantaged groups. Despite anxiety's pervasive influence on individual decision-making and its profound societal impact, research on systematically accounting for anxiety in operational contexts (e.g., within workplace settings) remains limited. Similarly, there is little focus on explicitly organizing efforts to address anxiety, such as sensing, anticipating, avoiding, mitigating, or responding to its triggers. This contribution explores how computational methods can address these gaps and expand the research landscape on anxiety. Specifically, we examine emerging trends in Anxiety-Sensitive Artificial Intelligence (AnxSAI), which focuses on AI systems equipped with models of anxiety. AnxSAI systems may be human-centric, adapting to anxiety-related factors (e.g., identifying anxiety-inducing elements in an environment, predicting how a system's actions might affect the anxiety levels of individuals), or simulating human-like deliberative processes and behaviors influenced by anxiety (e.g., artificial companions, agents in social simulations). Key findings on practical development and interdisciplinary relevance of AnxSAI will be introduced, such as autonomous agents, active inference models, and large language models (LLMs) for research on human empathy, futures studies, and digital humanities.

Title: **Too Real to Feel? Examining Avatar Realism in Digital Emotion Regulation Training**

Authors: **Naumann Eva**

Abstract: Background: Digital mental health interventions increasingly incorporate embodied conversational agents, such as avatars, to enhance user engagement and support emotion regulation—a key transdiagnostic factor in psychiatric disorders. However, the effects of avatar realism on intervention efficacy remain insufficiently explored, particularly in the context of digital emotion regulation training. This study examines the impact of avatar realism on training outcomes, user perception, and self-disclosure. Methods: A total of 203 participants completed a 30-minute digital emotion regulation training session facilitated by a conversational avatar. Participants were randomly assigned to one of four conditions: (1) ultra-realistic human avatar, (2) abstract toon-style human avatar, (3) robot avatar, or (4) control (audio waveform animation). Training effectiveness, user perception of the avatar, and self-disclosure were assessed using self-report measures, including the Client Satisfaction Questionnaire (CSQ), emotion ratings, and items from the Unified Theory of Acceptance and Use of Technology (UTAUT). Results:

ANOVA analyses revealed a significant main effect of condition on training satisfaction, with the ultra-realistic human avatar receiving lower ratings than all other conditions. Furthermore, interactions with the ultra-realistic avatar were rated as significantly more anxiety-inducing and less pleasant than those with other avatars. Positive emotions increased across all conditions except in the ultra-realistic avatar group during a gratitude exercise. Additionally, participants in the ultra-realistic avatar condition reported significantly lower levels of self-disclosure compared to all other conditions. Conclusion: The findings suggest that ultra-realistic human avatars may induce discomfort, thereby reducing engagement and intervention effectiveness, aligning with the uncanny valley hypothesis. These results have important implications for optimizing avatar design in digital mental health applications to maximize user acceptance and therapeutic efficacy.

Title: **A Gamepad-based Interface for Continuous Real-Time Emotion Tracing**

Authors: **Pathak Divya, Srinivasan Narayanan**

Abstract: Emotional states fluctuate dynamically in response to stimuli, requiring precise real-time measurement. Existing methods, such as slider-based and joystick-based systems, often lack intuitive responsiveness and introduce delays. We designed an interface that offers enhanced response ergonomics, allowing real-time visual feedback by continuously mapping emotional states (valence and arousal). Our gamepad-based interface overlays directly on stimuli and enables two-dimensional (x-axis: valence; y-axis-arousal) tracking of emotional states in real time. Participants get visual feedback through a red dot in the two-dimensional space as they continuously map their emotional state, concluding with a final arousal and valence response via the trigger button. We implemented a staircase training protocol to mitigate response biases arising from device unfamiliarity while systematically acclimating participants to the interface. The protocol begins with basic motor skill training involving gamepad handling and control, followed by iterative practice using a perceptual random dot motion task. Performance metrics are assessed at each stage to ensure proficiency before advancing to the main task. Experiment1 validated the interface against traditional slider methods using 61 images from the NAPS database in a two-block (order counterbalanced) design. In Block1, participants rated the images using traditional slider responses. Block2 used our overlay interface. The ratings from both methods showed high consistency for valence ($r = 0.721$) and arousal ($r = 0.77$). Additionally, Bland-Altman analysis revealed minimal systematic bias, confirming measurement equivalence between our novel protocol and established slider-based rating methods. Experiment2 extends this validation to dynamic video stimuli to track fluctuations in valence and arousal values with participant-specific calibrations, minimizing center-drift biases inherent in gamepad-based responses. We applied a low-pass filter to reduce high-frequency noise in motor movement data, preserving critical signal features. This interface advances emotion dynamics research by providing a robust and precise tool for continuous emotion annotation and has application in fields requiring real-time high temporal resolution data.

Title: **Transformative Learning and Artificial Intelligence: Emotions as Catalysts for Learning Processes**

Authors: **Heidelmann Marc-André**

Abstract: Transformative learning, as described by Koller (2012), is not the mere accumulation of

knowledge but a deep process of changing interpretative patterns. Learners face situations that challenge their previous perspectives, requiring them to develop new ways of understanding (Kokemohr 2007). Emotions are central to this process, acting as catalysts for change by triggering cognitive dissonance and prompting reflection. For transformative learning to occur, the unknown must be perceived as incomprehensible (Waldenfels 1997). The emotional response to unfamiliarity—such as irritation, uncertainty, or discomfort—often initiates transformation. When an experience cannot be integrated into one's existing worldview and self-concept, emotional pressure emerges, compelling individuals to question established patterns of interpretation (Marotzki 1999). This emotional tension fuels reflection and the development of new perspectives, making education an emotionally shaped encounter with the unknown (Koller 2012). As Artificial Intelligence (AI) becomes increasingly integrated into education, a key question arises: how does it impact emotional learning experiences (Wunder 2021)? AI systems can support transformative learning by adapting to learners' emotions through personalized feedback, emotion-recognition algorithms, and adaptive learning techniques. For instance, intelligent tutoring systems can create cognitive conflicts by exposing learners to unfamiliar perspectives (Zawacki-Richter et al. 2020). AI-enhanced learning environments can also regulate emotions by mitigating uncertainty or fostering motivation (Kasneci et al. 2023). However, to what extent can AI truly understand and respond to emotional reactions? How do algorithmic decisions influence emotional engagement in learning? This poster presentation examines the intersection of transformative learning, emotions, and AI from an interdisciplinary perspective. It highlights AI's potential to foster emotional learning while critically evaluating its impact on transformative education and the ethical implications of digitalization.

Title: Comparing Theoretical Models of Co-Occurring Emotions Using Multi-Modal Time Series Data

Authors: Küppers Sebastian, Lange Jens

Abstract: Many situations evoke multiple emotions at the same time. Lange and Zickfeld's (2023) work showed that from four parsimonious, formal emotion theories, the network theory of emotions explains these co-occurrences best. According to this theory, emotions co-occur because their respective networks of interacting emotion components overlap. Of note, Lange and Zickfeld's research is preliminary as participants provided only self-ratings of their emotional experiences (i.e., feelings, cognitions, motivations, physiological changes, expressions) once after watching arousing videos, neglecting the dynamic and person-specific nature of emotions. We aimed to replicate and extend their findings by (1) incorporating multi-modal emotion measures, (2) testing implications of a multidimensional approach to co-occurring emotions, and (3) comparing emotion theories separately for each participant. Participants watched four videos eliciting awe and fear simultaneously. We continuously assessed appraisals, heart rate, respiration rate, skin conductance level, facial expressions, and piloerection, complementing the single-timepoint self-ratings that were already part of Lange and Zickfeld's study. We expect to finish data collection early in February. Ultimately, this study contributes to developing a formal theory of co-occurring emotions.

Title: The Role of Awareness in Unconscious Emotional Processing: Evidence from CFS and

SCR Responses

Authors: **Gonul Turkmen Selen, Booth Robert**

Abstract: Research suggests that unconscious emotional stimuli can elicit physiological and evaluative responses, yet the role of awareness in moderating these effects remains unclear. This study examined how emotions rendered unconscious through continuous flash suppression (CFS) influence skin conductance responses (SCR) and evaluations of novel faces. Forty-two undergraduate students ($M = 21.98$, $SD = 4.21$) participated in the study, and a two-alternative forced choice (2AFC) task was used to assess CFS efficacy, categorizing participants into aware (performers $>50\%$) and unaware (guessers $\leq 50\%$) groups. Participants were exposed to disgust, fear, anger, and neutral expressions, while their SCR and post-trial face ratings were recorded. A 4 (emotion: disgust, fear, anger, neutral) $\times 2$ (awareness: aware, unaware) mixed factorial ANOVA revealed that while emotion and awareness did not independently affect SCR, their interaction approached significance ($p = .057$, $\eta^2 = .098$), suggesting that emotional expressions may elicit stronger physiological responses in unaware participants. Descriptive statistics suggested that unaware participants showed numerically longer latencies across emotional conditions, with the largest difference occurring for neutral expressions, but this effect did not reach significance. In contrast, novel face ratings did not differ significantly across emotions or awareness levels (all $p > .3$). The overall mean face rating was 4.60 ($SD = 0.96$), with unaware participants ratings slightly higher ($M = 4.90$, $SD = 1.19$) than aware participants ($M = 4.50$, $SD = 0.87$), though this difference was not significant. These findings contribute to ongoing discussions on the dissociation between physiological responses and conscious affective evaluations, suggesting that while awareness may play a role in autonomic reactivity, its influence was not robustly significant. The results indicate that unconscious emotional processing may elicit physiological changes in some cases, but this does not necessarily translate into explicit affective judgments.

Title: **Can Optical Heart Rate Measurement Track Emotional Processes in Children? Evaluating the Link Between Photoplethysmography and Emotional Processes in Preschool Children**

Authors: **Lorusso Sonja, Nischak Pablo, Diebold Tatiana, Burkhardt Bossi Carine, Harel Ori, Pruessner Jens, Perren Sonja**

Abstract: Preschool age is a crucial period for developing emotional competence, with deficits linked to long-term negative outcomes. However, studying emotions in young children is challenging, as their emerging regulation skills make emotions less observable, and their limited awareness and vocabulary hinder self-reports. Heart rate is a common physiological marker of emotional intensity and regulation, traditionally measured using electrocardiography (ECG) with chest electrodes. In contrast, wrist-worn sports watches offer a less invasive, more familiar alternative, increasing acceptance by children. These devices rely on photoplethysmography (PPG), which measures pulse rate by detecting blood volume changes in tissue via light sensors. While heart rate is well established in emotion research, the benefit of PPG-derived pulse rate as an indicator of emotion-related arousal remains unclear. To investigate this, 94 children from 16 German-speaking Swiss playgroups ($M_{age} = 3.75$ years, 58.62% female) participated in three standardized emotion-eliciting tasks designed to induce frustration, anticipation, and dynamic emotional shifts and one tablet-based emotion knowledge test serving as a physiological baseline.

Each session was video-recorded, with children wearing Polar Vantage V2 watches for continuous physiological monitoring. Trained raters assessed emotional expression based on the recordings using the Emotion Regulation Scoring System. Linear mixed models will examine (1) whether pulse rate is associated with observed emotional expression, and (2) whether pulse rate differs between the emotion-eliciting tasks. If pulse rate reliably reflects emotion-related arousal, we expect higher pulse rates to correspond with more intense emotional expression during the emotion-inducing tasks. Additionally, we expect pulse rates to be highest during the frustration task, lower during anticipation, even lower during dynamic emotional shifts, and lowest in the baseline condition. If we can demonstrate that pulse rates reliably capture emotional processes in children, they could enhance field research and expand studies on institutional factors, such as peer influence and group dynamics. Keywords: Photoplethysmography (PPG), preschool children, emotional arousal, emotion expression

Title: **I React to Bodies but not Faces, Replication and Extension of Aviezer et al., 2012**

Authors: **Pillaud Nicolas, Chassaing-Monjou Clément, Cottin Adèle**

Abstract: How do we truly assess the emotions of others? While numerous theories have highlighted the central role of facial expressions in evaluating emotions, some studies have challenged the ability to gauge others' feelings based solely on their faces (Aviezer et al., 2012). These studies suggest that we preferentially use bodies rather than faces to assess others' affective states. The aim of the present work is to replicate and extend these findings. A first preregistered experiment replicated the results obtained by Aviezer et al. (2012, Exp. 1). That is, the results (NExp1 = 194 - https://osf.io/h9pkn/?view_only=3716295e91614fbbb4d5706b3668923a) show that participants identified the expressed emotion only when bodies are presented on the picture. We conduct four other experiments to extend these results to other tasks (i.e., affective priming, affective misattribution procedure, feeling, and action tendencies). The results of the four preregistered experiments (NExp2 = 134 - https://osf.io/k6w2r/?view_only=5038a177e3944a53ad550ee1e8ae7965, NExp3 = 209 - https://osf.io/q4sut/?view_only=56fd0d79eb8e448a80539dbd3a0dedb3, NExp4 = 304 - https://osf.io/6zhdx/?view_only=3f33925fa59640afb68aec4b89b9eaed, NExp5 = 194 - https://osf.io/3n8m7/?view_only=505d186662614112a6b0813a2ea5cc41) show that stimuli presenting only bodies, rather than faces, consistently produce these classic effects found in the literature. Overall, these findings highlight that faces do not seem to be discriminative in detecting emotions, nor do they elicit affective reactions when affective stimuli are extreme. These results thus support the idea that context is predominant in the detection of emotions.

Title: **Mood modulations of affective word processing: a predictive perspective of encephalographic data**

Authors: **Kopaeva Ekaterina, Blomberg Johan, Roll Mikael**

Abstract: An individual's emotional state, or mood, has been shown to influence perception, attention, decision-making and other cognitive processes. Its effects extend to language processing, where it is seen as part of the pragmatic context. If a linguistic expression is non-neutral in itself, mood might augment or attenuate its perceived valence. Motivated by a lack of clarity regarding the nature and temporal dynamics of mood-valence interaction, we conducted an exploratory EEG study to find whether an individual's mood might change the temporal profile of

emotional word processing. We looked at the interaction of mood and valence in a control and two mood-induced conditions over three consecutive time windows in a semantic categorisation task focusing on early processing, where data is inconsistent. In the three mood conditions, twenty-two healthy participants performed valence ratings of neutral, positive and negative words. Non-parametric cluster-based permutation tests were performed for the selected time windows and components to determine an unbiased scalp distribution. Results revealed an interaction in a happy but not sad mood. High valence words elicited greater N1 amplitudes (130-190 ms) in the control condition, but none in happy. In the subsequent time window (200-300 ms), congruence effects persisted: low valence words were attended to in a happy mood, as seen in increased P2 amplitudes, and high valence words were facilitated, as less negative EPN slopes show. In predictive-coding frameworks, mood is seen as a hyperprior that affects both the model and incoming signal. Happy moods make the model more precise and the input controllable. In this view, the results are interpreted as indicators of prediction error marked by the N1 and subsequent model update in the P2 time-window, with reduced amplitudes signalling a better-fitted model. A lack of a reverse pattern in a sad mood speaks in favour of asymmetrical mood effects on cognition.

Title: **The Human Affectome**

Authors: **Yu Alessandra N. C.**

Abstract: Theoretical perspectives in the interdisciplinary field of the affective sciences have proliferated rather than converged due to differing assumptions about what human affective phenomena are and how they work. These metaphysical and mechanistic assumptions—shaped by academic context and values—have dictated the field’s affective constructs and operationalizations. However, a foundational premise concerning the purpose of affective phenomena can guide us to a common set of metaphysical and mechanistic assumptions. In the capstone paper for the special issue “Towards an Integrated Understanding of the Human Affectome”, a collaboration among 173 affective researchers from 23 countries, we converge on a nested teleological principle for human affective phenomena: from the broadest purpose of an organism (to ensure viability), to complex organisms (to execute operations), then mechanisms of meaning (to enact relevance), and finally their human-specific projectivity (to entertain abstraction). Based on this principle, human affective phenomena can collectively be considered as algorithms that either adjust based on the comfort zone (affective concerns) or monitor those adaptive processes (affective features). Those for affective concerns indicate the adaptive relevance of the environment. These can be organized hierarchically according to distance from metabolic impact (immediate to distal), including physiological and operational concerns, and can also act as global summaries of concerns across time, such as trajectory and optimization. Those for affective features monitor how the adaptive process is going on a momentary basis, include valence (how well or not) and arousal (the extent to which various systems are mobilized), and can inform global concerns. This teleologically-grounded framework offers a principled agenda for organizing existing perspectives as well as generating new ones. Ultimately, we hope the Human Affectome brings us a step closer to not only an integrated understanding of human affective phenomena—but an integrated field for affective research through a forum for discussion.

Title: Perceived Threat as a Driver of Hate: Lessons from the 2024 U.S. Election in a Global Context

Authors: Aumer Katherine

Abstract: Hate in social science is often linked to perceived threats to identity, values, or safety. Allport (1954) associated prejudice and dehumanization with group-based threats, while Sternberg's "Duplex Theory of Hate" (2003) emphasized fear and anger as amplifiers. The 2024 U.S. election served as a catalyst for hate, with political opponents framed as existential or moral threats. Research by Fischer et al. (2018) and Halperin (2011) suggests that moral violations and political contexts magnify threat perceptions, while Aumer and Bahn (2016) argue that hate functions as a self-protective response. This study tested whether hate correlates more strongly with perceived threat than with prejudice or dehumanization. A total of 645 participants were recruited via Amazon Turk, with a final sample of 499 after data cleaning. Participants were divided into four groups—Democrats Pre-Election, Democrats Post-Election, Republicans Pre-Election, and Republicans Post-Election. Of these, 301 completed the survey before the election, and 198 after. The sample leaned Democratic ($n = 366$) over Republican ($n = 133$). Participants rated political figures and parties on measures of hate, perceived threat, and dehumanization, with the latter assessed through beliefs about targets' "evolved" status. Across groups, hate correlated with perceived threat ($r = .53$ to $.62$) significantly more than with prejudice ($r = .0$ to $.23$) or dehumanization ($r = -.2$ to $.0$). Fisher's Z-tests confirmed these differences ($p < .01$). Findings underscore perceived threat as the primary driver of hate, aligning with theoretical models from Allport to contemporary research. Hate arises when individuals perceive existential or moral threats, reinforcing political hostility. Addressing threat-based narratives may be key to reducing polarization and fostering societal understanding.

Title: The Hidden Cost of Psychological Threat: How Economic Stress Fuels Emotional Suppression and Undermines Well-being

Authors: Valor Segura Inmaculada, Alonso Ferres María, Guzmán María Teresa

Abstract: Objectives. When individuals feel psychologically threatened—whether due to financial instability or health concerns—their well-being often suffers. However, the underlying mechanisms driving this relationship remain unclear. This study investigates emotional suppression as a key pathway through which psychological threats may erode well-being. We propose that suppressing emotions in response to economic or health-related stressors can be counterproductive, draining self-regulatory resources and impairing problem-solving and social support. Specifically, we examine whether emotional suppression mediates the link between psychological threat, and overall well-being and health. Methods. A nationally representative sample of Spanish adults ($N = 969$) participated in the study. The average participant was 52 years old (range: 18–89), with a gender distribution of 55% male and 45% female. Household income averaged €2,469 per month, and all participants were in a romantic relationship at the time of the study. Results. Our findings reveal a striking pattern: individuals facing greater economic (but not health-related) psychological threat were significantly more likely to engage in emotional suppression. In turn, this suppression was strongly associated with diminished life satisfaction, lower happiness and positive affect, poorer physical health, and heightened levels of

depression and anxiety. Crucially, these effects persisted even after accounting for gender, age, and socio-economic status. Conclusions. These findings highlight the hidden emotional cost of financial stress and the pivotal role of emotion regulation in shaping mental and physical health outcomes. When individuals suppress their emotions in response to economic hardship, they may inadvertently amplify their distress rather than alleviate it. Interventions that encourage healthier emotion regulation strategies could offer a powerful buffer against the negative effects of economic insecurity, ultimately promoting resilience and well-being in the face of psychological threat.

Title: **Climate change and hope ratings modulate valence and arousal ratings of emotional images**

Authors: **Plonski Paul, Durgin Frank**

Abstract: Theories of emotion and emotion regulation posit temporally recursive cycles between components of emotional episodes, including appraisals and subjective feelings (McRae & Gross, 2020; Scherer, 2022). Changing appraisals can modulate emotion, such as thinking about a situation as less relevant to oneself (Opitz et al., 2015). Despite substantial research on appraisal, less is known about the effect of relevance contexts other than one's own goals and well-being on emotion processes. We hypothesized that rating how much an emotional stimulus represents climate change or hope would affect valence and arousal ratings. United States adults (N = 298) from Prolific viewed 90 images, equally split between negative images of climate change, positive images of nature, and neutral images. After four seconds, response scales appeared, sequentially, below the image. Participants randomly assigned to the control condition rated only valence and arousal. In two experimental conditions, participants rated how much the image represented either climate change or hope, then rated valence and arousal. We tested effects with two linear mixed-effects models with random intercepts for participant and image, and a random slope for image type by participant. Fixed effects were condition (treatment coded), image type (sum-to-zero coded), and the interactions. Rating climate change increased negativity and negative emotion, whereas rating hope increased negativity but upregulated positive arousal and downregulated negative arousal. Results suggest that thinking about relevance to contexts beyond the self can affect emotion. These evaluations may involve processes similar to affect labelling, which, like hope ratings, can downregulate negative (Lieberman et al., 2011) and upregulate positive emotion (Vlasenko et al., 2021). More research would be necessary to compare relevance contexts to appraisals of relevance to one's own goals (Lazarus, 1991; Moors, 2017; Scherer, 2009). Lazarus, R. S. (1991). Cognition and motivation in emotion. *American Psychologist*, 46(4), 352–367. <http://dx.doi.org/10.1037/0003-066X.46.4.352> Lieberman, M. D., Inagaki, T. K., Tabibnia, G., & Crockett, M. J. (2011). Subjective responses to emotional stimuli during labeling, reappraisal, and distraction. *Emotion*, 11(3), 468–480. <https://doi.org/10.1037/a0023503> McRae, K., & Gross, J. J. (2020). Emotion regulation. *Emotion*, 20(1), 1. <https://doi.org/10.1037/emo0000703> Moors, A. (2017). Appraisal Theory of Emotion. In V. Zeigler-Hill & T. K. Shackelford (Eds.), *Encyclopedia of Personality and Individual Differences* (pp. 1–9). Springer International Publishing. https://doi.org/10.1007/978-3-319-28099-8_493-1 Opitz, P. C., Cavanagh, S. R., & Urry, H. L. (2015). Uninstructed emotion regulation choice in four studies of cognitive reappraisal. *Personality and Individual Differences*,

86, 455–464. <https://doi.org/10.1016/j.paid.2015.06.048> Scherer, K. R. (2009). The dynamic architecture of emotion: Evidence for the component process model. *Cognition & Emotion*, 23(7), 1307–1351. <https://doi.org/10.1080/02699930902928969> Scherer, K. R. (2022). Theory convergence in emotion science is timely and realistic. *Cognition and Emotion*, 36(2), 154–170. <https://doi.org/10.1080/02699931.2021.1973378> Vlasenko, V. V., Rogers, E. G., & Waugh, C. E. (2021). Affect labelling increases the intensity of positive emotions. *Cognition and Emotion*, 35(7), 1350–1364. <https://doi.org/10.1080/02699931.2021.1959302>

Title: **The Role of Emotion in Updating Expectations for the Distant Future**

Authors: **Orphal Lara, Pinquart Martin**

Abstract: People update their expectations when presented with new information, but emotions may systematically influence how much they revise their beliefs. Positive emotions have been linked to greater openness to new information, while negative emotions have been associated with skepticism. However, it remains unclear whether such effects extend to expectations about an uncertain future. This study investigates whether emotions (positive, negative, neutral) influence the degree to which people update their expectations about future world events after receiving probabilistic expert feedback. Participants are randomly assigned to one of three emotional conditions (positive, negative, neutral) and complete an emotion induction task, selecting which of two emotional images (from the OASIS database) better fits an emotional quote. They then estimate the probability (0-100%) that a given statement about the world in 50-100 years will come true (e.g., “As automation takes over most professions, many countries will introduce a universal basic income.”). Next, they receive expert expectations about the event’s likelihood, described as 75% reliable, and subsequently update their probability estimates. This sequence—emotional induction, prior expectation, expert feedback, updated expectation—is repeated for 15 statements. Finally, participants complete a PANAS questionnaire and a cognitive conflict detection task. To ensure statements were neutral in valence and moderately realistic, a pretest (N = 47) assessed 120 statements on perceived likelihood and desirability. The pretest confirmed that desirability significantly predicted likelihood ratings, and the main study includes 15 statements rated as neither desirable nor undesirable, with average likelihood ratings. Expectation updating will be modeled using linear mixed-effects models, testing whether (1) emotional states influence the magnitude and direction of updating (toward or away from expert feedback), and (2) emotions lead to systematic deviations from Bayesian updating. Exploratory analyses will examine (3) whether cognitive conflict detection moderates expectation updating, (4) whether the magnitude of expectation violation (the absolute difference between prior beliefs and expert feedback) modulates the effect of emotion and (5) whether emotional states influence trust in expert feedback, measured by calculating the weight of the expert’s feedback in the participant’s update. This study integrates emotional states and Bayesian updating to examine how emotions shape expectation revision about uncertain, real-world questions. Data collection will begin in February 2025, and results will be available at the time of the conference.

Title: **To synchronise or not to synchronise? Investigating physiological synchrony in emotional performances**

Authors: **Goldsack Roydon, Hyland Nicola & Eisenbarth Hedwig**

NA NA

Title: **Task switching during nonverbal interactions promotes cardiac synchrony, while social anxiety reduces it. Considering the role of reciprocal attention in physiological synchrony**

Authors: **Boukarras Sarah, Placidi Valerio, Rossano Federico, Era Vanessa, Aglioti Salvatore Maria & Candidi Matteo**

NA NA

Title: **Partner stress decreases cardiac synchronization in romantic couples**

Authors: **Denk Bernadette F., Meier Maria, Ocklenburg Sebastian, Packheiser Julian, Wienhold Stella, Volkmer Nina, Gaertner Raphaela J., Klink Elea S.C., Dimitroff Stephanie J., Benz Annika B.E. & Pruessner Jens C.**

NA NA

Title: **Harmful to Relationships, Helpful in Adversity: The Nuanced Role of Psychopathic Traits in Partner Support, Stress and Physiological Synchronisation**

Authors: **Hissey Aaron, Hammond Matt & Eisenbarth Hedwig**

NA NA

Title: **Comparing the effectiveness of putatively adaptive and maladaptive emotion regulation strategies: An experience sampling study**

Authors: **Rasskazova Mariia, Lyusin Dmitry**

Abstract: Emotion regulation (ER) refers to the ability to regulate the intensity, frequency, and duration of emotions. One of the key questions is the relation between ER strategies adaptiveness, i.e. to which extent a strategy is related to long-term outcomes, and effectiveness, i.e. to which extent a strategy changes emotion at the moment. This study examined the effectiveness of putatively adaptive (cognitive reappraisal, problem solving, and acceptance) and maladaptive (suppression, rumination, and avoidance) ER strategies using experience sampling. Method. For ten days, participants (N = 112, aged 18–52, M = 27.30, SD = 8.74; 99 females, 13 males) reported to which extent they experienced seven negative emotions (anxiety, irritation, loneliness, guilt, depression, apathy) and used the aforementioned ER strategies since the previous report. Six-point Likert scales were used for responses. Two indices of the use of ER strategies were analyzed, frequency (how often a strategy is used) and intensity (how intensely a strategy was employed at the moments when it was used). The direct measure of strategy effectiveness was the correlation between the intensity of its use and a decrease in negative affect calculated across all measurement points within a participant. The differences between the effectiveness of adaptive and maladaptive ER strategies were not statistically significant. Noteworthy, adaptive strategies correlated positively with a decrease in negative affect, whereas negative correlations were obtained for maladaptive strategies. The use of strategies was also associated with higher average negative affect, with this effect being larger for frequency compared to intensity. These associations were weaker for adaptive strategies which can be interpreted as their more flexible use and may indirectly indicate their higher effectiveness. To better understand the comparative

effectiveness of these strategies, in future it would be useful to include other relevant variables in the analysis, such as emotion differentiation and emotional reactivity. Key words: emotion regulation, negative affect, experience sampling

Title: **Validation of Affect Labeling as an implicit emotion regulation task in a Greek-speaking sample**

Authors: **Constantinou Elena, Koursarou Sofia**

Abstract: Objectives: Previous studies have shown that merely labeling an emotion can have emotion regulatory effects, from modulating brain activity to dampening the subjective experience of emotion. The aim of this study was to validate a modified Affect Labeling task (Constantinou et al., 2014) in Greek by examining its effect on subjective emotion experiences and its association with self-reported emotion regulation difficulties. Methods: Sixty-six (so far) Greek-speaking young adults completed six picture viewing trials (3 pleasant, 3 unpleasant), under three within-subject conditions: merely viewing the pictures, labeling the depicted emotion or labeling the content depicted on each picture. After each trial participants rated their experienced pleasantness (valence) and arousal. Accuracy and response time during the labeling tasks were recorded, while participants also completed the Difficulties in Emotion Regulation Scale (DERS), as a construct validity measure. Results: Preliminary results showed that both content and affect labeling resulted in dampened negative emotion (increased valence and reduced arousal), but only content labeling dampened pleasant emotion. Correlation analyses showed that content and affect labeling effects were highly correlated with each other, but were both unrelated to the accuracy or speed of labeling. Furthermore, affect labeling effects were unrelated to participants' self-reported difficulty in emotion regulation. Discussion: Current findings replicate previous studies confirming that affect labeling can dampen both the valence and arousal components of emotions, particularly negative ones. The fact that affect labeling produces emotion regulatory effects comparable to those of content labeling, and unrelated to participants' performance, may indicate that affect labeling effects rely on a symbolic conversion mechanism inherent in the process of labeling (regardless of what is labeled). The lack of correlations with self-reported difficulties in emotion regulation, further confirms the implicit nature of the labeling effects and supports the usefulness of the task among individuals with emotion regulation deficits.

Title: **Neuroticism and the neural basis of implicit cognitive reappraisal: an fMRI study**

Authors: **Várkonyi Gergő, Rendes Réka, Deák Anita**

Abstract: Cognitive reappraisal is a form of emotion regulation that entails the systematic reframing of an emotion-eliciting stimulus (e.g. changing one's construal of an emotional event). It is a skill with notable individual differences and trait neuroticism is one of the primary sources of this variability. Therefore, in our study, we aimed to explore the neural basis of cognitive reappraisal while also investigating how neuroticism modulates the observed associations. 40 young adults filled in the neuroticism subscale of the Big Five Inventory, and we registered their brain activation in an implicit reappraisal task comprising 15 pairs of social-emotional images with negative and non-negative captions. Outside the scanner, participants were presented with the same images and instructed to rate their emotional experiences on valence and arousal dimensions. Whole-brain analysis revealed that both negatively and non-negatively labeled

images recruited prefrontal control cortices (e.g. vIPFC), suggesting that stimulus captions inherently evoked regulatory operations. ROI analysis showed that arousal (but not valence) ratings correlated significantly with reappraisal-related activation in the vIPFC, dIPFC, dmPFC and caudate, indicating that our paradigm was more effective in capturing arousal (versus valence) modulation. Finally, our analyses implicated that neuroticism played a moderator role between regulatory brain activation and reappraisal success of arousal in that successful reappraisal required more neural and cognitive resources in high (compared to low) trait scorers. Taken together, our results corroborate the notion that many forms of emotion regulation rely on large-scale brain networks, however, it also demonstrates that the functioning of the network might depend on trait-level individual differences, which needs to be further addressed in future research.

Title: **Emotion Regulation Flexibility Through the Lens of Resting-State Functional Connectivity**

Authors: **Ohad Tal, Madar Asaf, Tavor Ido, Sheppes Gal, Yeshurun Yaara**

Abstract: Emotion regulation flexibility (ERF) is the ability to adjust regulatory strategies to differing circumstances. Although ERF was shown to be linked with individuals' well-being, the neural mechanisms underlying it are currently unknown. In this study, we set out to explore the neural correlates of ERF, and specifically test the hypothesis that more flexible connectivity between brain networks will be associated with more flexible emotion regulation. To test this, 40 participants underwent behavioral evaluation of ERF ability and resting-state fMRI scanning, as resting-state fMRI has been shown to represent trait-like aspects of network functional connectivity. The behavioral task included aversive words of high and low intensity, and participants were required to choose between two strategies to regulate their emotions: distraction or reappraisal. Behavioral results revealed large variability in ERF scores ($M=20.13\pm15.83$), which enabled the examination of individual differences in neural functional connectivity. Preliminary neuroimaging results revealed that ERF scores were negatively correlated with functional connectivity between the Control Network and Attention Networks, and the Default Mode Network (DMN), such that the stronger the connectivity between these networks, the lower the emotion regulation flexibility score. These findings suggest that lower connectivity between neural networks involved in control, attention, and theory of mind processes, may allow for more effective switching between emotion regulation strategies, which characterize individuals with high emotion flexibility capacity.

Title: **Dissociative reactions - on the transient inability to feel emotions**

Authors: **Daniels Judith**

Abstract: It has long been recognized that dissociative processing is common in the general population and constitutes a transdiagnostic factor in mental health disorders. One of its core features is the transient inability to feel emotions, a phenomenon often referred to as emotional numbing. In the past, most studies investigating emotional numbing induced a dissociative state in their participants by reactivating a previous dissociative reaction the person exhibited during a traumatic event. Therefore, most experimental studies employed a script-driven imagery paradigm during which the participant is asked to re-imagine the worst moment during the

traumatic event. We will present three studies that employed dissociative induction techniques unrelated to traumatic experiences, which are less aversive in nature and circumvent potential confounders such as initial upregulation of physiological arousal. In total, $N = 688$ first year university students underwent a dissociation induction and recorded their acute dissociative reactions via self-report. Two different dissociation inductions were used: an interpersonal eye gazing task during reduced illumination ($n = 404$) and a prolonged, passive scrolling task using digital material ($n = 284$). Both were conceptualized to induce a form of trance characterized by depersonalization, derealization and emotional numbing. The extent of this reaction will be analyzed regarding several potential predictors including childhood trauma, trait tendencies to dissociate, emotional reactivity, and attachment patterns. Results will be presented at the conference.

Title: **Boredom and Arousal: A Multilevel Meta-Analysis**

Authors: **Stempfer Lisa, Stoll Sarah E. M., Fries Jonathan, Pekrun Reinhard, Goetz Thomas**

Abstract: Boredom is often described as a negative emotion characterized by low physiological arousal. However, empirical studies on the level of arousal associated with boredom remain contradictory. Narrative reviews have discussed these findings, but the available evidence has not yet been analyzed quantitatively. Therefore, we conducted a multilevel meta-analysis on the boredom-arousal relation in correlational and experimental studies. A comprehensive literature search was performed in November 2023. Overall, 214 effect sizes from 75 unique samples fulfilled the inclusion criteria (total participant sample size $N = 6,570$; 47.45% female). The analysis yielded a significantly negative average effect size ($d = -0.36$; 95% CI $[-0.49, -0.22]$). The correlational evidence suggested that more intensely experienced boredom was related to reduced arousal, $r = -.13$, 95% CI $[-.22, -.05]$. The aggregated experimental evidence showed that the state of boredom was associated with significantly lower arousal as compared to various control conditions; $d = -0.40$, 95% CI $[-0.59, -0.22]$. However, moderator analyses suggested that arousal was not significantly lower in boredom as compared to neutral conditions. All types of physiological indicators showed significant negative relations to boredom, except for heart rate variability. There was no indication of a publication bias. In sum, we present the first meta-analytic study on the relation between boredom and arousal which suggests that boredom is best characterized as a low-arousal emotion. Implications for emotion theory and practice are discussed.

Title: **Do we exhibit differential immune responses to different types of disgust?**

Authors: **Mungur Ramandeep, Harris Lasana, Purcell Daniel, Ogbe Orezi**

Abstract: Background: Disgust is hypothesised to have evolved to detect pathogens, later being coopted into the social domain. Chapman and colleagues' (2009) argued that moral and physical disgust were the same emotion, owing to both evoking the same facial expression. Conversely, Tybur and colleagues (2009) argued that disgust can be split into three distinct domains: Pathogen, Sexual, and Moral. Previous studies have shown that the perception of disgusting images can lead to a preparatory immune response (e.g. Stevenson et al., 2012). It is unclear, however, if any specific type of disgust drives this effect. For instance, seeing human excrement may be associated with a pathogen/disease threat, hence a preparatory immune response is

logical. Conversely, witnessing someone commit fraud should not be associated with a disease threat, yet may still be both appraised and described as disgusting (though anger may also be a significant emotion in moral disgust (Giner-Sorolla et al., 2018)). To better understand if all disgust is the same, we test if all types of disgust produce the same immune response. Methods: In this between-subjects study, participants are placed in one of four groups with 34 participants per group (n = 136). Each group is shown scenarios (captioned images) that were designed to evoke one of pathogen, sexual, or moral disgust, with the control group being non-moral anger. We measure the salivary immune responses for the following pro-inflammatory cytokines: TNF-alpha, IL-6, and IL-1 beta. Predicted results: There will be a significant difference in condition, with Pathogen Disgust eliciting a significantly higher immune response compared to both the Moral Disgust and Control conditions. The Moral Disgust condition will elicit a significantly higher immune response compared to the Control condition. No predictions are made regarding Sexual Disgust owing to the scant research in this area. Please note that data analysis is ongoing.

Title: **How Honour Amplifies the Perceived Threat of Jealousy, and Controlling Behaviour**

Authors: **Shaban Azad Hadi, Giner-Sorolla Roger, Pina Afroditi, Grigoropoulos Iraklis**

Abstract: In many Middle Eastern cultures, “gheirat” is an honour-based protective emotional reaction to relational boundary violations which usually elicit jealousy in other cultures. The present study explored and compared the experience of gheirat in Greece and UK as honour and non-honour cultures. 236 British and 262 Greek psychology students took part in an online survey and were asked to describe an experience where a 3rd person or/and a loved one were getting too close to the other. Participants rated their affective states during the experience, and completed questionnaires on dispositional jealousy, honour orientation, and attitude towards intimate partner violence. Greek participants appraised the experience of relational boundary violation as more threatening to their loved one compared to British participants. Furthermore, they reported higher levels of feeling “worried”, “vigilant”, “controlling”, and “outraged” during the experience. Greek participants also scored higher on preventive jealousy (but not reactive and anxious jealousy), acceptance of sexual violence, and psychological violence. This heightening of preventive jealousy with honour was also observed within both cultures. Greek participants scored higher on all subscales of honour orientation. These results suggest that jealousy-eliciting situations are experienced as more threatening to the loved one in honour cultures. This may lead to preventive jealousy tendencies, and higher acceptance of controlling behaviour (a form of psychological violence), which is a response to higher acceptance of sexual violence by society.

Title: **Musical Emotion Transfer in Expert Listeners**

Authors: **Varga Peter, Parkinson Brian**

Abstract: Music listeners have been the subject of numerous studies to understand their behaviours and preferences in response to composers’ creative output. No previous research, however, has directly compared composers’ intentions and techniques with listener evaluations. This is partly the result of a majority of previous empirical studies into music listening relying on college student and general population samples, which might not have the consistent expertise necessary to reliably evaluate the technical mechanics of original compositions as well as other psychological effects (Berlyne, 1974; Simonton, 2010). Responding to this gap in the literature,

the present study compared the predictive effects of 47 composers' affective intentions and felt emotions on a panel of expert listeners' evaluations of the specific emotional impact of their original compositions. Composers were asked to rate their feelings and intentions using the adjective format of Yik and colleagues' (2011) 12-Point Affect Circumplex (12-PAC) as well as an aesthetic emotion item. Experts rated their responses using the same adjective items. We found that both composer intentions and composer felt emotions were significantly correlated with expert ratings for all affect items. There were stronger standard effects (β) for intended than felt emotions, suggesting that expert listener responses are primarily driven by the affective content composers intend to convey, but that, to a lesser but still significant extent, composers' ambient felt emotions also play a role in determining how listeners respond to their music. This study demonstrates the importance of examining both composer and listener effects and paves the way for future research that should examine the locus of emotion in both composers and listeners with greater precision.

Title: **Dimensional and Categorical Emotional Ratings of Russian Nouns: The Database ENRuN-2**

Authors: **Sysoeva Tatiana, Lyusin Dmitry**

Abstract: Databases with emotional ratings of words are used in a wide array of emotion and cognitive research including the processing of emotional information, mood induction, and sentiment analysis. There are two main approaches to emotional ratings used in the development of such databases: dimensional, where words are rated along the major affective dimensions such as valence and arousal, and categorical, where associations with discrete emotion categories such as happiness or anger are rated. These databases exist in many languages but until now, there has only been a small Russian database containing 378 nouns. We present its expanded and advanced version ENRuN-2 that contains approximately 6,000 Russian nouns of different frequency and length. ENRuN-2 includes both dimensional (valence and arousal) and categorical (happiness, sadness, anger, fear, and disgust) ratings for each word, as well as information on word frequency and length. Each word was rated by at least 10 male and 10 female native Russian speakers aged between 18 and 77 years old ($M = 24.54$, $SD = 9.84$). Psychometric analysis showed high reliability and validity of the obtained ratings for all scales. Intra-rater consistency ranged from 0.744 for sadness to 0.935 for happiness, and inter-rater consistency varied from 0.873 for arousal to 0.961 for valence. Validity was estimated by the correlations between the ENRuN-2 and previous ratings, which were no smaller than 0.854 across different scales. Relationships between the scales replicate typical patterns found in the similar databases, including a U-shaped relationship between valence and arousal, and moderate negative associations between ratings for negative emotion categories. ENRuN-2 is a free access database and allows for the addition of new words and emotional rating scales.

Title: **Four-dimensional neural space for moral emotions**

Authors: **Chen Jinglu, Santavirta Severi, Putkinen Vesa, Boggio Paulo Sérgio, Nummenmaa Lauri**

Abstract: Moral reasoning is an intuitive process guided by abstract moral principles and life experiences that individuals use to evaluate moral dilemmas and make decisions regarding

right and wrong. Moral foundations theory proposes a framework of intuitive moral reasoning across populations, yet the brain basis of processing different moral dimensions remains unclear. Here we mapped brain networks involved in moral reasoning during naturalistic movie viewing. A total of 104 participants watched a Finnish film *Käsky* during functional MR imaging. The movie depicts an emotional and morally complex story about the Finnish civil war. Dynamic ratings of 20 emotions and moral dimensions, derived from the moral foundations theory, were collected from 43 viewers. Dimensionality reduction was employed to identify the dependencies among the moral dimensions, while general linear model, cumulative analysis and intersubject correlation (ISC) analysis identified associations between high-order moral dimensions and brain activity. Our analysis revealed four primary moral dimensions: virtue (positive morality), hierarchy (collective respect), rebellion (self-interest), and vice (moral transgressions). These dimensions reflect two key aspects of moral perception: (1) the evaluation of behaviors as morally right or wrong, and (2) the assessment of whether these behaviors are directed towards individuals or groups. Each of these clusters exhibited distinct neural activation patterns. The vice cluster demonstrated the most extensive positive activation, while the hierarchy cluster was associated with significant negative activation. Both the anterior cingulate cortex and the middle cingulate cortex showed positive activation exclusively in response to the vice cluster, suggesting that this may represent a neural signature for vice-related moral reasoning. ISC analysis and cumulative mapping highlighted widespread brain activation during moral scenes, encompassing extensive cortical areas, cingulate cortex, and striatum. Collectively, our results support a four-dimensional neural and psychological space for moral reasoning, which engages extensive brain regions and distinct patterns across moral foundations.

Title: Comparing your “happy” to my “happy”: How to assess the affective space of an individuum

Authors: Horn Francisca, Kreuzpointner Ludwig, Wüst Stefan, Schwarzbach Jens V., Kudielka Brigitte M.

Abstract: Emotions are of utmost relevance for our everyday life as well as in the development and maintenance of psychological disorders. Regarding theories underlying these constructs, research mainly focusses on a generalizing perspective for all humans, neglecting the inherent individual component. By developing an instrument that measures the individual affective space of a person, we endeavor to apply the personalized medicine approach to emotions and transfer the results to psychiatry and psychotherapy for better diagnostics, treatments, and prevention interventions. Therefore, we compared three methods to assess individual mental representation of emotions: 1) A Multi-Arrangement Task (MAT), 2) Pairwise Comparisons (PC), and 3) Self-Assessment Manikin (SAM) rating scales. Using a within-subjects design with N = 100, emotionally loaded adjectives of the Affective Norms for English words (ANEW) were arranged or rated according to the respective method on a computer monitor with subsequent calculation of a dissimilarity matrix (DSM). Analyzing these DSMs showed good test-retest reliabilities for each method while clear differences emerged in the exploratory analyses. Dimensionality analyses using multidimensional scaling showed two or three dimensions yielding an ideal solution to represent the data in the SAM with some participants using up to five dimensions in the MAT. Plotting the affective spaces into polygons revealed the highest correlation of the surface areas in

the MAT, indicating that the MAT might be the better instrument when the focus is on assessing emotion differentiation. Trying to identify underlying group structures with Ward-clustering was not successful in any of the three methods.

Title: Exploring Emotional Granularity through Freely Generated Mental and Bodily Labels: A Network Analytic Approach

Authors: Telazzi Ilaria, Biassoni Federica, Ninivaggi Elisa, Viaggi Eleonora, Balzarotti Stefania

Abstract: Emotional granularity (EG) refers to the ability to make fine-grained distinctions among emotional states, reflecting individual differences in the use of emotion concepts to construct emotional experiences. Traditional approaches to EG have primarily focused on mental state terms. However, it has recently been suggested that incorporating bodily terms alongside mental descriptors provides a more comprehensive representation of emotional experiences. According to this perspective, we employed a network analytic approach to explore EG across different levels of analysis. Eighty-five women suffering from chronic pelvic pain participated in a one-month diary study. For each pain episode, participants freely generated and rated affective labels describing their current affective experience and subsequently evaluated their emotional state using a set of 14 negative emotional adjectives. Preliminary results indicate that participants used a broad range of affective labels, encompassing both mental and bodily terms. Notably, differences emerged in the network structure between individuals with high and low EG. Women with lower EG reported a greater number of affective labels, primarily mental in nature; conversely, those with higher EG exhibited a greater number of distinct emotion communities and a more coherent pattern of connections. Overall, our findings emphasize the value of assessing EG beyond standardized lists of mental state terms. Incorporating both mental and bodily descriptors may offer a more accurate definition and operationalization of the construct. A conceptual framework that is less strictly mentalistic could provide a more comprehensive representation of the complexity of emotional experiences.

Title: The Role of Categorization in Emotion Differentiation

Authors: Suchkpva Ekaterina, Lyusin Dmitry

Abstract: Emotion differentiation (ED) refers to an individual's ability to distinguish between their emotions. This capacity is a significant predictor of effective emotion regulation and psychological well-being. The present study aimed to explore the cognitive underpinnings of ED by examining its relationship with categorization. Participants ($N = 74$, aged 18–53, $M = 24.23$, $SD = 7.86$; 52 females, 22 males) completed two versions of a card sorting task (emotional and neutral) and underwent a 10-day experience sampling protocol. ED was measured using the inverse ICC (3, k) with Fisher's z-transformation. Categorization was assessed as the average number of categories created across four subtests for each task version. Results revealed a significant positive correlation between number of categories in the emotional and neutral versions of the sorting task ($r(74) = .57$, $p < .001$). Additionally, positive and negative ED measures were positively correlated ($r(74) = .24$, $p = .041$). However, no significant correlation was found between number of categories and ED. These findings suggest that while categorization is consistent across emotional and neutral contexts, it does not serve as a cognitive basis for ED. This raises intriguing

questions about the nature of ED, as it may operate in a distinct psychological space, potentially independent of traditional cognitive processes. Further research is needed to uncover the mechanisms underlying ED and its unique role in emotional functioning. Key words: emotion differentiation, categorization, experience sampling

Title: **The Dimensionality of Positive Valence**

Authors: **Brandolini Gabriel, Carter Olivia, Koval Peter**

Abstract: Positive valence is the intrinsic positivity or pleasantness of an emotion, feeling, or mood. Emotion researchers disagree on whether positive valence is unidimensional - a single spectrum ranging from minimally positive to maximally positive - or multidimensional - a complex construct that accommodates multiple distinct ways an emotion can be experienced as positive. To test whether positive valence is unidimensional or multidimensional, we provided participants (N=292, Female=61%, Age: M=19.96, SD=5.66) choices between video stimuli from different emotion categories (Admiration, Amusement, Awe, Romantic-Love, and Surprise) while utilising a film+instructions mood induction procedure. Participants selected the response option which resembled their more ideal emotional state, and also rated the videos on valence, emotional-intensity and novelty (adapted from Affect Rating Dial). Results showed participants reliably chose the option with higher valence, regardless of emotional category (Predictions=2113/2308, Accuracy=91.55%, WAIC=1.258). This provides evidence that valence functions as a 'common currency' across these different positive emotions, pointing towards the unidimensionality of valence by suggesting a shared form of positivity. We also generated stimuli with response options combining videos from multiple emotional categories to explore how valence was operationalised in the decision-making process. Rather than using a lexicographic, winner-takes-all, or loser-takes-all strategy, results showed participants usually summed the valence of individual videos to determine decision outcomes (Predictions=2121/2906, Accuracy=73%, WAIC=1.635). This suggests individuals tend to aggregate the valence of complex stimuli in an additive process when determining their ideal emotional state. Finally, participants made judgements about their experience of 11 positive emotions in terms of 15 candidate valence dimensions (e.g., pleasure, goal-congruence, action-tendency, morality, object-appraisal, inner-reinforcer). We utilised factor analysis to discern whether valence emerged as a single unified factor (unidimensional) or whether distinct elements of valence emerged as multiple factors (multidimensional). Parallel analysis, a reliable method for determining how many factors to retain, indicated that only one of these factors was statistically significant beyond random chance. This finding lends further support in favour of the unidimensional view of positive valence.

Title: **A scoping review on positive emotions in autism**

Authors: **Moreno Laura, Manfredi Mirella, Di Poi Giona, Gruber June, Mcpartland James C., Samson Andrea**

Abstract: Difficulties with positive emotion have been described across a variety of clinical conditions. Yet few studies have systematically reviewed the role of positive emotions in autism spectrum conditions. A scoping review on positive emotions in autism can potentially detect preserved or even enhanced positive emotions in this population and shed light on the similarities and differences between individuals with and without autism.

Title: **Attachment dimensions predict how and why people regulate their partner's emotions: A daily diary dyadic study**

Authors: **Maccann Carolyn, Wu Bernice**

Abstract: Attachment anxiety and attachment avoidance underlie many patterns of interaction in adult relationships. The current study examines whether these attachment dimensions predict the emotion regulation goals and strategies people use to regulate their partner's emotions. In our study, 195 opposite-sex couples recruited from Prolific completed a short attachment assessment and 6 end-of-day surveys over 3 consecutive weekends. Actor Partner Interdependence Models were used to model the effect of attachment on regulation goals and regulation strategies. For instrumental regulation goals, several actor effects were significant for both men and women: 1) attachment anxiety predicted greater pro-social goals (increase closeness/reduce conflict) and impression management goals; 2) attachment avoidance predicted greater 'gain power' goals. Actor effects on hedonic goals (make self feel better, make partner feel better, make partner feel worse) and partner effects on all goals differed for men versus women. For all three affect worsening strategies (criticizing, withdrawing, pressuring), attachment avoidance showed significant actor and partner effects for both men and women, with stronger goal formation and greater use of strategies in all cases. Of the five affect-improving strategies, only one actor effect (and no partner effects) was significant for both men and women: Avoidant attachment predicted lower valuing. This study demonstrates that adult attachment—and particularly attachment avoidance—is an important driver of why people attempt to regulate their partner's emotions (regulation goals) and also how they do it (regulation strategies).

Title: **From Appraisals to Action: The Influence of Compassion and Distress on Prosocial Behavior**

Authors: **Garrido-Macías Marta, Valor Segura Inmaculada, María Teresa Guzmán**

Abstract: Every day, we encounter situations where others need our help. The literature indicates that the perception (appraisals) of those in need influences the level of compassion experienced and, consequently, the willingness to help. However, it remains unclear how distress affects helping behavior. Studies suggest, first, that there are two types of distress and, furthermore, that self-focused and other-oriented distress have distinct impacts on helping behavior, highlighting the importance of distinguishing between the two forms. Thus, the main aim of this research is to explore the role of appraisals, as well as emotions of distress and compassion, in shaping helping behavior. To carry out the study, a sample of 1,542 participants from the general population was used (Mean age = 50.99, SD = 18.42; 50.7% women and 49.7% men), who were recruited through a survey company (NETQUEST) in June 2023. The measures included in the analysis were a suffering scenario, the observer's assessments (identification with the person in need, attribution of responsibility, and perceived self-efficacy), emotions of compassion and distress, and helping behavior (specific and general). Results revealed that both compassion and other-oriented distress mediated the relationship between appraisals and helping behavior. Specifically, greater similarity to the person in need, lower attribution of responsibility, and higher perceived efficacy were linked to increased levels of compassion and distress, which, in turn, were associated with a stronger desire to provide both specific and general help. This study

broadens our understanding of how compassion and distress can improve helping tendencies in stressful situations.

Title: **Investigating the interplay of self- and other-oriented benefits in motivational and experiential component of prosocial behavior**

Authors: **Monnor Teerawat, Preuschoff Kerstin, Ugazio Giuseppe**

Abstract: Prosocial behavior is fundamental to social cohesion, encompassing diverse interactions where individuals exert effort to benefit others, ranging from helping to collaboration. While prosociality manifests in various forms, its multifaceted nature is often unexamined and instead observed as a unitary construct. Although this approach provides valuable insights and facilitates systematic assessment, it may overlook nuances of this behavior. To contribute to addressing this gap, this project adopted a componential approach to emotion to investigate key components of prosocial behavior—effort mobilization and affective experience following task completion—in different combinations of self- and other-oriented benefits. A redesigned version of an effort-based slider task was employed, where different dimensions of the effort and affective experiences were assessed using self-report, heart rate variability (HRV) analysis and performance-based measures obtained during task performance. Participants ($N = 51$; 16 males, 28.38 ± 6.58 years; 35 females, 24.11 ± 4.03 years) took part in a multi-agent session (with 3–5 participants per session). Preliminary analyses indicate that participants show greater motivation and experience more positive affect when tasks provide direct benefits to themselves. Data analysis is ongoing, and final results will be presented at the conference.

Title: **DiffuseFace: a database of AI-generated face portraits to enrich diversity in emotion research.**

Authors: **Firmani Alessia**

Abstract: We present DiffuseFace, a database of AI-generated face portraits designed to address the limitations of traditional databases and enhance diversity in emotion studies. Traditional databases, such as CEED (Benda & Scherf, 2020) and FACES (Ebner et al., 2010), typically include photographs of real actors captured in controlled environments. While these stimuli have proven invaluable, their creation demands substantial time and financial resources and raises privacy concerns related to material sharing. These constraints may contribute to the limited representation of ethnicities and facial expressions in such databases, ultimately reducing diversity and potentially hampering the generalizability of findings (Barrett et al., 2019). Recently, psychological research has highlighted the potential of generative AI (Demszky et al., 2023) in advancing research methodologies. We extend this approach to emotion research by leveraging generative AI to create a large, diverse face database with reduced costs and fewer constraints compared to traditional methods. DiffuseFace comprises 600 portraits of women and men from 20 nationalities, displaying 14 distinct emotional expressions (e.g., amusement, shame) and a neutral pose, generated using the open-source Stable Diffusion model. Building on prior research (Holland et al., 2019), we will collect data on attitudes toward generative AI, perceived realism, and emotion recognition ratings from 500 U.S. participants. We will also evaluate whether AI-generated stimuli are comparable to real-actor portraits in characteristics critical to emotion research. Preliminary data collected from 260 individuals indicate that these AI-generated faces are perceived as highly

realistic and that their emotional expressions are generally well-recognized. These findings underscore the potential of generative AI to produce diverse, high-quality stimuli efficiently, improving the generalizability of psychological and emotion research.

Title: Moral Emotions vs. Bildung: Navigating Professional Formation in Academic Teaching and Learning

Authors: Musaeus Peter

Abstract: University education involves discipline-specific ways of knowing and is an affective, evaluative process where moral emotions shape experiences for both students and teachers. Emotions such as shame, guilt, pride, and elevation influence moral development and professional identity formation, particularly in ethically significant disciplines. While research has explored emotions in motivation and achievement (Pekrun, 2006; Eynde & Turner, 2006), moral emotions remain understudied in academic life. Drawing on moral psychology (Haidt, 2003; Gray & Wegner, 2011) and empirical studies on moral emotions (Tangney et al., 2007), this paper examines how teachers regulate moral norms, embody values, and navigate ethical dilemmas in pedagogy. We also analyze how students experience moral emotions in response to feedback, assessment, and peer interactions. Klafki's concept of Bildung emphasizes autonomy and long-term moral growth, while moral emotions serve as immediate, socially embedded responses reinforcing norms. We explore whether Bildung fosters self-reflection beyond immediate emotional reactions. Using a narrative and microphenomenological case study, preliminary findings suggest moral emotions play a dual role: shame may hinder engagement, while guilt can foster ethical responsibility. Likewise, emotions like elevation and admiration—elicited by witnessing acts of virtue, including scientific excellence—enhance motivation. These findings highlight the need for pedagogical frameworks that integrate moral emotions into a spiral curriculum centered on Bildung and professional identity development. Rather than offering stand-alone ethics or well-being courses, universities should embed discussions of moral emotions across disciplines. By mapping their role in learning, this research contributes to understanding how academic environments shape moral sensibilities and professional identities.

Title: CambiaColore: a movement-based technology for socio-emotional learning in the classroom

Authors: Ceccaldi Eleonora

Abstract: This work presents CambiaColore, a movement-based technology for emotional expression in children. Co-designed with teachers and educators, it provides teachers with an engaging tool for socio-emotional learning. Recognizing, regulating, and expressing emotions are key skills that foster self-regulation, well-being, and social integration. Many classroom curricula address these abilities, yet research shows teachers often lack confidence in implementing them. Technology can help by offering engaging ways to support socio-emotional learning by helping students better grasp the complexity behind these abilities. Following these premises, we co-designed CambiaColore, to foster emotional reflection and expression in the classroom in primary school children. The system consists of: a computer, a glass table, a retroreflective paint roller, a camera, and a projector. Users interact by rolling the paint roller over specific areas on the table, each corresponding to an emotion-associated color, and by moving the roller

to create digital paintings that visually represent their feelings. Designed for group settings, it generates a final collective canvas displaying the class's emotions. Saved drawings can be used for further discussion on emotional antecedents and how group emotions shape the overall picture (i.e. the emotional atmosphere of the classroom). CambiaColore aims to help children name, express, and accept all emotions, including negative ones, reinforcing self-awareness and emotional regulation. It also encourages movement-based emotional expression, highlighting the link between emotions and bodily states, and helps students understand the interplay between their emotions and those of their peers. Moreover, CambiaColore will be used to collect a dataset of children's drawings, associated emotions (as verbally expressed by the children), and movement data. This dataset will enable studies on the relationship between color choices, drawing characteristics, and emotional states (both at the individual and group level), potentially enhancing the system with feedback features to help teachers better understand and support students' emotions.

Title: **Prosodic Emotion Recognition is Associated with Musical Abilities in Children**

Authors: **Fasano Maria Celeste, Nuti Gianni, Monaci Mariagrazia, Filippa Manuela**

Abstract: Emotional prosody recognition — the ability to interpret emotions conveyed through pitch, rhythm, and dynamic intonation profiles — is crucial for children's social and emotional development. This study examined emotional prosody recognition in 7-8-year-old children, focusing on the influence of musical skills, gender differences, and affective-motivational traits. A total of 649 children (280 girls) were exposed to linguistically meaningless stimuli expressing four emotions (anger, fear, happiness, sadness) and neutral expressions. Participants rated the type and intensity of perceived emotions on continuous scales, and their musical abilities were assessed. Additional data on affective, motivational, and musical characteristics were collected via questionnaires. Findings reveal a clear hierarchy in emotion recognition accuracy in childhood, with anger ($M = 3.28$, $p < .001$) and joy ($M = 2.28$, $p < .001$) as the most recognizable emotions. A significant gender effect was observed, with girls outperforming boys in overall emotion recognition ($p = .045$), particularly for negative emotions such as fear ($p = .045$) and sadness ($p = .045$). Emotional prosody recognition was significantly correlated with both melodic (.18) and rhythmic abilities (.20), with stronger associations observed for anger and sadness, for the latter only with rhythmic ability sadness. Additionally, musical reward sensitivity, empathy, attention, and extrinsic motivation were positively associated with emotion recognition. Gender differences emerged in these relationships, with girls showing stronger correlations with motivation-related variables (.19) and boys demonstrating stronger links with empathy-related traits (.15). This study is the first to investigate in detail the factors influencing emotional prosody recognition in a large sample of 7-8-year-old children, highlighting the critical role of musical abilities and sensitivity. The findings suggest early musical training as a promising tool to support emotional development in young children.