



# HUMBOLDT-UNIVERSITÄT ZU BERLIN

# **Consortium of European Research on Emotion Conference** March 27 – 28, 2014, Berlin, Germany



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# WELCOME TO CERE 2014

This year we have an impressive program with three internationally renowned keynote speakers - Rainer Reisenzein, Martijn van Zomeren and Patrik Vuilleumier. 17 symposia, 8 paper sessions and 3 poster sessions with exciting topics across the full range of emotion research.

The conference takes place at the main campus of the Humboldt-University in Unter den Linden 6 close to many sight-seeing destinations and museums. Included in your conference materials are maps and a list of nearby restaurants.

A conference requires many helping hands for come together and the organizing committee would like to thank the scientific committee, the students helping with the organization and the organizational support staff for the dedication and hard work.

We hope that all of you will have a splendid conference experience at CERE 2014

<b>CERE 2014 Organization Committee</b>	CERE 2014 Scientific Committee
Prof. Dr. Ursula Hess	Prof. Dr. Ursula Hess
Dr. Christophe Blaison	Dr. Christophe Blaison
Dr. Ulrich Klocke	Dr. Ulrich Klocke
	DiplPsych. Jonas Dietrich
Student Assistant	DiplPsych. Isabell Hühnel
Christopher Kollhed	M.Sc. Janka Kuszynski
	DiplPsych. Helen Landmann

# **Organizational Support**

Prof. Dr. Jens Nachtwei Dipl.-Hist. Christine Kupper Dipl.-Psych. Maxi Freudenberg Guido Kiecker Carla Strauß

# **GENERAL INFORMATION**

## **REGISTRATION\***

On the day before the conference (March 26), the registration will be held in the Foyer of the Audimax (Auditorium Maximum). The Audimax is located at the main building of the Humboldt University, Unter den Linden 6. It can be accessed via the main entrance, Unter den Linden 6, or via the inner yard, heading from Dorotheenstraße/Hegelplatz (please see map on page 6).

During the conference (March 27-28), the registration area will be located in the building Dorotheenstraße 24, in the entrance area at the ground floor.

Registration will be held during the following hours:

Wednesday, March 26	14:00-18:00	Unter den Linden 6, Entrance Audimax
Thursday, March 27	08:00-18:00	Dorotheenstraße 24, Entrance Area
Friday, March 28	08:00-18:00	Dorotheenstraße 24, Entrance Area

# POSTER SESSIONS

Poster sessions will be held in the SENATSAAL located in the main building of the Humboldt University (Unter den Linden 6). The main building can be accessed via the main entrance of Unter den Linden 6 or via the inner yard, heading from Dorotheenstraße/Hegelplatz.

Building hours are 06:00-22:00 daily. No CERE attendees will have access to this space before or <u>after these hours</u>. All posters must be assembled and removed during the designated assemble and dismantle times for each session.

The schedule for poster presentation assembly and dismantle is as follows:

#### Poster Session I (Thursday, March 27)

14:00-14:30

08:00-08:30	Posters Assembled
08:30-13:00	Posters Available for Viewing
13:00-14:30	Authors Present for Discussion and Questions
14:30-15:00	Dismantle Posters
Poster Session II (Thursday, March 27)	
15:00-15:30	Posters Assembled
15:30-18:00	Posters Available for Viewing
18:00-19:00	Authors Present for Discussion and Questions
19:00-19:30	Dismantle Posters
Poster Session III (Friday, March 28)	
08:00-08:30	Posters Assembled
08:30-12:30	Posters Available for Viewing
12:30-14:00	Authors Present for Discussion and Questions

Authors Present for Discussion and Questions Dismantle Posters

#### ANNOUNCEMENTS

You are invited to use the bulletin board in the Registration Area (Dorotheenstraße 24) to post the following information:

- Employment opportunities
- Announcement of social activities
- Any other messages to attendees

Audible signals from cellular phones may be a distraction to the speakers as well as the audience. Please program these accordingly, and take phone calls outside of the meeting rooms. Thank you.

# **INTERNET STATION**

Every CERE attendee will have access to the local WIFI with EDUROAM. Participants who do not have an EDUROAM access will be provided with an individual internet access at the registration desk. In case you do not bring your devices to the conference, you are welcome to use the Internet Station:

An Internet station will be available for all attendees to use at the registration area (Dorotheenstraße 24) during the following times:

Wednesday	14:00-18:00
Thursday	08:00-18:00
Friday	08:00-18:00

# **EXHIBITORS**

Take time while you are at the CERE conference to visit the exhibit area held in the Registration Area (Dorotheenstraße 24). Exhibitors contribute financial support to the CERE conference and we ask that you take a few minutes to spend time in the exhibit area looking at the products, services and equipment offered by the companies represented. Thank you.

#### **Open Exhibit Hours**

Wednesday	14:00-18:00
Thursday	08:00-19:00
Friday	08:00-19:00

# CONDUCTED CITY TOUR

The conducted Berlin city tour takes place on Wednesday, March 26 at 16:00. If you registered for the tour, please make sure to be at the registration area (Foyer Audimax, Unter den Linden 6, see maps on page 6) at 16:00.

# LOCATION AND TRAVEL

CERE 2014 will take place in the main building of the Humboldt-Universität zu Berlin and the building Dorotheenstraße 24.

Address Senatssaal & Audimax: Unter den Linden 6, 10117 Berlin.

Address rooms 1.101, 1.102, 1.103, 1.204 and 1.205: Dorotheenstraße 24, 10117 Berlin.

# Maps

# Main Building: Unter den Linden 6





# Dorotheenstraße 24

# 1st Floor



2nd Floor



# Arrival in Berlin

# **From Tegel Airport**

Busses from Tegel International Airport operate to S+U Alexanderplatz, Hauptbahnhof (bus TXL [3]), and S+U Zoologischer Garten (buses X9 and 109) for the standard ticket fare. It takes around 45 minutes to Alexanderplatz – it is much quicker to get off at Hauptbahnhof or Zoologischer Garten and change to the S-Bahn (the bus ticket remains valid for this).

# From Schönefeld Airport

Take preferentially the RB7 and RB14 regional trains. These Express trains run to and from central Berlin (Mitte) every half hour from 5 am -11.30 pm and take approx. 25 min to/ from Alexanderplatz; 30 min to /from Berlin Hauptbahnhof and 35 min to/ from Zoologischer Garten. There are two of these every hour and they leave the airport station at 25 minutes and 55 minutes past the hour. The trains are big and comfortable and run a far quicker service than the S-Bahn.

The S-Bahn S9 runs every 20 minutes from Schönefeld airport. If all goes smoothly, it will take you approx. 30 min to/ from Ostkreuz and 45 minutes to/ from Pankow, while the S45 connects to the circle-line (Ringbahn) and also runs every 20 minutes.

# **Getting around in Berlin**

Berlin is huge but it is well served by the public transport system. If you arrive by car, you may consider parking it during the conference and use the excellent bus, tram, train (the "S-Bahn") and underground (the "U-Bahn") services to get around. Berlin uses a zone system, but you are unlikely to need to go beyond zone A and B, except on trips to Potsdam or to the Schönefeld Airport (SXF). This is a very large area. The public transport system (U-Bahn, S-Bahn, bus, tram, regional rail) uses a common ticket.

# **Ticket Prices**

Standard tickets ( $\leq 2.40$  for A and B) are valid for any travel within two hours of validation, in a single direction, within the appropriate fare zones. There is no limit to transfers. For a single journey you can buy a cheap Kurzstrecke for  $\leq 1.40$ , but this is only valid for 3 stops on the U-Bahn or S-Bahn (six stops by bus or tram); no transfers are permitted.

Several options are available for unlimited travel. Prices listed here are only for zones A and B: prices for A, B, and C cost marginally more. Check the machines for the actual prices:

Single Ticket Berlin AB: €2.60, ABC (incl. Potsdam): €3.20, reduced: €1.60, ABC: €2.30.

Quadruple card 4 Fahrten Karte (4 single trips AB bought at once for a reduced price) €8.80, reduced: €5.60.

AB Tageskarte (day card): €6.70, ABC Tageskarte (incl. Potsdam): €7.20.

AB 7-Tage-Karte (7-Day-Ticket): €28.80, ABC 7-Tage-Karte (incl. Potsdam): €35.60.

The Berlin WelcomeCard is available in 8 different versions: tariff zone AB only Berlin:  $\leq 18.50 / 24.50 / 31.50$  for 2 / 3 / 5 days, tariff zone ABC Berlin, Potsdam and the surrounding area:  $\leq 19.90 / 25.90 / 35.90$  for 2 / 3 / 5 days. Free travel with all methods of public transport for 48 hours, 72 hours or 5 days from the day of purchase; save up to 50% on more than 200 tourist and cultural highlights; Handy guide in pocket book format with insider tips and tour suggestions; City plan for Berlin and Potsdam and a Network plan for public transport. You can order the Berlin WelcomeCard in various sales points (berlin airports, main station, Hotels or online).

The Berlin WelcomeCard Museum Island : valid for 72 hours in the tariff zone AB: €34, ABC: €36 plus free admission to all museums on the Museumsinsel of Berlin (Old National Gallery, Old Museum, Bode Museum, New Museum and Pergamon Museum). A folded leaflet with inner city map and an overview of the S-Bahn and U-Bahn railway networks of Berlin is included. Buy the CityTourCard Museumsinsel in hotels, at the main station (Hauptbahnhof, Südkreuz, Zoologischer Garten, Alexanderplatz, Friedrichstraße), berlin airports or online.

### **Purchasing Tickets**

All tickets are available at vending machines at U- and S-Bahn platforms. English and other European languages are available. Payment is mostly by local bank cards, coins and banknotes. Ticket machines may not take banknotes bigger than 10 euros. If you need assistance most larger stations have staffed ticket counters where you can ask questions and buy tickets. Buses will accept cash, and make change for tickets. Hotels may sell tickets as well.

#### **Journey Planner**

The <u>Route planner</u> of the BVG is excellent! (http://www.fahrinfo-berlin.de/Fahrinfo/bin/query.bin/en?ld=bvg)

<u>U-Bahn & S-Bahn network map</u> (http://www.fahrinfo-berlin.de/Liniennetz/index?language=en)

#### Taxi

Taxi services are also easy to use and a bit less expensive than in many other big European cities. If you ask for a short trip ("Kurzstrecke"), as long as it's less than 2km and before the taxi driver starts the meter running, the trip normally is cheaper,  $\leq 4$ . This only applies if you flag the taxi down on the street, not if you get in at a taxi rank.

# **Restaurants in the Area of the Conference**

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Vapiano: Mittelstraße 51, 10117 Berlin

# €€

Mutter Hoppe: Rathausstraße 21, 10178 Berlin <u>12 Apostel</u>: Georgenstraße 2, 10117 Berlin <u>Augustiner am Gendarmenmarkt</u>: Charlottenstraße 55, 10117 Berlin <u>Treffpunkt Berlin</u>: Mittelstraße 55, 10117 Berlin <u>Nante Eck</u>: Unter den Linden 35, 10117 Berlin

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Le petit Felix: Behrenstraße 72, 10117 Berlin Parioli Restaurant: Behrenstraße 37, 10117 Berlin

# **PROGRAM SCHEDULE** Wednesday, March 26

#### 14:00-18:00

UNTER DEN LINDEN 6 Fover Audimax

**Registration Open** 

16:00-18:00

UNTER DEN LINDEN 6 Foyer Audimax

**Conducted City Tour** 

# **PROGRAM SCHEDULE** Thursday, March 27

8:00-19:00

**DOROTHEENSTRASSE 24** Fover

**Registration Open** 

9:00-10:30

UNTER DEN LINDEN 6 Audimax

Key Note I

#### **EMOTIONAL CONTROL OF PERCEPTION** AND BRAIN STATES

Patrik Vuilleumier

10:30-11:00

**DOROTHEENSTRASSE 24** Foyer

Coffee Break

11:00-13:00 **DOROTHEENSTRASSE 24** Room 1.101

#### Symposium 1.1

# WHY HUMANS CRY: THE FUNCTIONS OF **TEARS**

**Chairs**: Agneta Fischer<sup>1</sup> & Ad Vingerhoets<sup>2</sup> Asmir Gračanin<sup>1</sup>, Domagoj Švegar<sup>1</sup>, Florian Cova<sup>3</sup>, Dale C. Hesdorffer<sup>4</sup> <sup>1</sup>University of Rijeka, <sup>2</sup> Tilburg University, <sup>3</sup>University of Geneva, <sup>4</sup>Columbia University

# WHY CRYING DOES AND SOMETIMES DOES NOT SEEM TO ALLEVIATE MOOD: A QUASI-**EXPERIMENTAL STUDY**

Asmir Gračanin<sup>1</sup> <sup>1</sup>University of Rijeka

#### THE EFFECTS OF FACIAL EXPRESSIONS AND TEARS ON THE SPEED OF SEX RECOGNITION

Domagoj Švegar<sup>1</sup> <sup>1</sup>University of Rijeka

#### MUSIC AND VISIBLE TEARS IMPACT ON THE **AFFILIATIVE REACTIONS TO EMOTIONAL** FACES

Ad Vingerhoets<sup>1</sup> & Yvonne Van Der Velden<sup>1</sup> <sup>1</sup>Tilburg University

### **BEING MOVED TO TEARS**

Florian Cova<sup>1</sup> <sup>1</sup>University of Geneva

#### THE DEVELOPMENTAL TRAJECTORY OF **CRYING IN RESPONSE TO THE ARTS**

Dale C. Hesdorffer<sup>1</sup>, Michael Trimble<sup>2</sup> & Tiffany Kakkanatt<sup>3</sup> <sup>1</sup>Columbia University, <sup>2</sup>National Hospital for Neurology and Neurosurgery, <sup>3</sup>Fox Lane High School

# 11:00-13:00

**DOROTHEENSTRASSE 24** Room 1.102

# <u>Symposium 1.2</u>

# **COLLECTIVE EMOTIONS AND EMOTIONS IN COLLECTIVE CONTEXT**

**Chairs**: Bernard Rimé<sup>1</sup> & Arvid Kappas<sup>2</sup> <sup>1</sup>University of Louvain, <sup>2</sup>Jacobs University

# FROM INDIVIDUAL TO INTERPERSONAL **EMOTIONAL TRANSACTIONS: COPING WITH TERRITORIAL OFFENSES IN THE PARIS SUBWAY**

Martin Aranguren<sup>1</sup> <sup>1</sup>Ecole des Hautes Etudes en Sciences Sociales

#### EVALUATING THE IMPACT OF SOCIAL CONTEXTS ON EMOTIONAL EXPRESSION **DURING MUSIC PERFORMANCE**

Donald Glowinski<sup>1</sup>, Baron Naëm<sup>1</sup>, Tamara Ott<sup>1</sup>, Kanika Shirole<sup>1</sup>, Marc-André Rappaz<sup>2</sup> & Didier Grandjean<sup>1</sup>

<sup>1</sup>NEAD – Swiss Center for Affective Science – University of Geneva, Switzerland, <sup>2</sup>Geneva University of Music

## UNDERSTANDING COLLECTIVE EMOTIONS IN ONLINE COMMUNITIES THROUGH AGENT-BASED MODELING

David Garcia<sup>1</sup>, Arvid Kappas<sup>2</sup>, Dennis Kuester<sup>2</sup> <sup>1</sup>ETH Zurich, <sup>2</sup>Jacobs University

## **PSYCHOSOCIAL EFFECTS OF EMOTIONAL** SYNCHRONY AND IDENTITY FUSION AMONG DANCERS, MUSICIANS, SINGERS AND ACTORS OF A MUSICAL AND ENTERTAINING SHOW

Bernard Rimé<sup>1</sup>, Maria Paola Adurno<sup>1</sup>, Dario Páez<sup>2</sup> & Larraitz Zumeta<sup>2</sup> <sup>1</sup>University of Louvain, <sup>2</sup>University of the Basque Country

#### DISCUSSION

Arvid Kappas<sup>1</sup> <sup>1</sup>Jacobs University 11:00-13:00

**DOROTHEENSTRASSE 24** Room 1.103

## Symposium 1.3

# METHODOLOGICAL ADVANCES IN **CONTEMPORARY EMOTION RESEARCH**

**Chairs**: Andrea Hildebrandt<sup>1</sup> & Werner Sommer<sup>2</sup>

Sally Olderbak<sup>1,</sup> Oliver Wilhelm<sup>1</sup>, Rachael E. Jack<sup>3</sup>, Martin Junge<sup>4</sup>, David Schmidtke<sup>5</sup> & Andrea Hildebrandt<sup>4</sup> <sup>1</sup>Universität Ulm, <sup>2</sup>Humboldt-Universität zu Berlin, <sup>3</sup>University of Glasgow, <sup>4</sup>Ernst-Moritz-Arndt Universität, <sup>5</sup>Freie Universität Berlin

# **ASSESSING INDIVIDUAL DIFFERENCES IN** EMOTION EXPRESSION ABILITY BASED ON SOFTWARE CODED EMOTION SCORES

Sally Olderbak<sup>1</sup>, Andrea Hildebrandt<sup>2</sup>, Oliver Wilhelm<sup>1</sup>, Mattis Geiger<sup>1</sup> & Werner Sommer<sup>3</sup> <sup>1</sup>Universität Ulm, <sup>2</sup>Ernst-Moritz-Arndt Universität

## EXPANDING THE DISCUSSION OF ASSESSING **EMOTION EXPRESSION ABILITY WITH A** FOCUS ON ACTION UNITS

Oliver Wilhelm<sup>1</sup>, Andrea Hildebrandt<sup>2</sup>, Werner Sommer<sup>3</sup>, Stefan Schinkel<sup>3</sup> & Sally Olderbak<sup>1</sup> <sup>1</sup>Universität Ulm, <sup>2</sup>Ernst-Moritz-Arndt Universität, <sup>3</sup>Humboldt-Universität zu Berlin

## MODELLING DYNAMIC FACIAL EXPRESSION SIGNALS USING A DATA-DRIVEN METHODS

Rachael E. Jack<sup>1</sup>, Oliver G. B. Garrod<sup>1</sup> & Philippe G. Schyns <sup>1</sup>Institute of Neuroscience and Psychology, University of Glasgow

# METRIC SCALES OF EMOTION INTENSITY

Martin Junge<sup>1</sup> & Rainer Reisenzein<sup>1</sup> <sup>1</sup>University of Greifswald

## ESTIMATING INDIVIDUAL DIFFERENCES IN EMOTION RELATED ERP DIFFERENCE **COMPONENTS – A LATENT DIFFERENCE-**SCORE MODELING APPROACH

Andrea Hildebrandt<sup>1</sup>, Manuel Völkle<sup>2</sup>, Guillermo Recio<sup>3</sup>, Oliver Wilhelm<sup>4</sup>, Werner Sommer<sup>3</sup>

<sup>1</sup>Ernst-Moritz-Arndt Universität, <sup>2</sup>Max-Planck-Institute for Human Development, <sup>3</sup>Humboldt-Universität zu Berlin. <sup>4</sup>Universität Ulm

## 11:00-13:00

**DOROTHEENSTRASSE 24** Room 1.204

# Paper Session 1.1

"EMOTION THEORY"

## FALSE MENTAL FEEDBACK AS A METHOD TO STUDY THE NEURAL REPRESENTATION **OF FEAR, DISGUST AND MORBID FASCINATION**

Suzanne Oosterwijk<sup>1</sup>, Kristen Lindquist<sup>2</sup> & Lisa Feldman Barrett<sup>3</sup> <sup>1</sup>University of Amsterdam, <sup>2</sup>University of North Carolina, Chapel Hill, <sup>3</sup>Northeastern University

# ON THE AUTOMATIC LINK BETWEEN AFFECT AND TENDENCIES TO APPROACH AND AVOID: CHEN AND BARGH (1999) REVISITED

Mark Rotteveel<sup>1</sup> <sup>1</sup>University of Amsterdam

#### ARE VALENCE AND AROUSAL SEPARABLE **IN EMOTIONAL EXPERIENCE?**

Assaf Kron<sup>1</sup>, Ariel Goldstein<sup>2</sup> & Maryna Pilkiw<sup>3</sup>, A.K. Anderson<sup>4</sup> <sup>1</sup>University of Haifa, <sup>2</sup>The Hebrew University of Israel, <sup>3</sup>University of Toronto, <sup>4</sup>Cornell University

# DESIRES, COGNITIVE EVALUATIONS AND **EMOTIONS**

Maria Magoula Adamos<sup>1</sup> <sup>1</sup>Georgia Southern University

# **EMOTIONS, EVALUATIONS AND DESIRES**

Federico Lauria<sup>1</sup> <sup>1</sup>Department of Philosophy, Swiss Centre for Affective Sciences, University of Geneva

# **REAL EMOTIONS - A STUDY OF** SPONTANEOUS AND ENACTED EMOTIONAL **VOCALISATIONS**

Disa Sauter<sup>1</sup>, Agneta Fischer<sup>1</sup> <sup>1</sup>University of Amsterdam

# 11:00-13:00 **DOROTHEENSTRASSE 24** Room 1.205

# Symposium 1.4

# FEAR AND LOATHING AND COGNITION: THE IMPACT OF ANXIETY ON PERCEPTION, LEARNING AND MEMORY

**Chairs**: Matthias J. Wieser<sup>1</sup> Valentina Rossi<sup>1</sup>, Matthias Gamer<sup>2</sup>, Marta Andreatta<sup>3</sup>, Mathias Weymar<sup>4</sup> <sup>1</sup>Ghent University, <sup>2</sup>University Medical Center Hamburg-Eppendorf, <sup>3</sup>University of Würzburg, <sup>4</sup>University of Greifswald

# STATE ANXIETY AND THREAT CONTENT INTERACTIVELY MODULATE ATTENTION SELECTION IN PRIMARY VISUAL CORTEX

Valentina Rossi<sup>1</sup> & Gilles Pourtois<sup>1</sup> <sup>1</sup>Ghent University

# FUNCTIONAL ROLE OF THE AMYGDALA DURING FACE PROCESSING IN NORMAL AND IMPAIRED SOCIAL FUNCTIONING

Matthias Gamer<sup>1</sup> <sup>1</sup>University Medical Center Hamburg-Eppendorf

# PHASIC VS. SUSTAINED FEAR IN HUMANS AND THE INFLUENCE OF TRAITS ANXIETY

Marta Andreatta<sup>1</sup>, Evelyn Glotzbach-Schoon<sup>1</sup>, Christian Tröger<sup>1</sup>, Julian Wiemer<sup>1</sup>, Andreas Mühlberger<sup>2</sup> & Paul Pauli<sup>1</sup> <sup>1</sup>University of Würzburg, <sup>2</sup>University of Regensburg

# WHO'S YOUR FRIEND? DEFICITS IN **DISCRIMINATIVE SOCIAL CONDITIONING IN** SOCIAL ANXIETY

Matthias Wieser<sup>1</sup> <sup>1</sup>University of Würzburg

# EFFECTS OF STRESS AND ANXIETY ON EMOTIONAL EPISODIC MEMORIES: **INSIGHTS FROM EVENT-RELATED** POTENTIALS

Mathias Weymar<sup>1</sup>, Janine Wirkner<sup>1</sup>, Margaret M Bradley<sup>2</sup> & Alfons O. Hamm<sup>1</sup> <sup>1</sup>University of Greifswald, <sup>2</sup>University of Florida,

#### 13:00-14:30

UNTER DEN LINDEN 6 Senatssaal

Lunch and Poster Session I

14:30-16:30

**DOROTHEENSTRASSE 24** Room 1.101

#### Symposium 2.1

# ATTACHMENT INSECURITY AND SOCIAL **EMOTION PERCEPTION**

**Chairs**: Konstantinos Kafetsios<sup>1</sup> & Maren Westphal<sup>2</sup> Pascal Vrtička <sup>3</sup> & Panoraia Andriopoulos<sup>1</sup> <sup>1</sup>University of Crete, <sup>2</sup>Pace University, <sup>3</sup>Stanford University

# THE INFLUENCE OF ATTACHMENT **INSECURITY ON BRAIN ACTIVITY DURING** SOCIAL EMOTION PERCEPTION

Pascal Vrtička<sup>1</sup>, Martin Debbane<sup>2</sup>, David Sander<sup>2</sup>, Patrik Vuilleumier<sup>2</sup> & Allan Reiss<sup>1</sup> <sup>1</sup>Stanford University, <sup>2</sup>University of Geneva

## **RELATIONSHIP STATUS MODERATES AVOIDANT ATTACHMENT DIFFERENCES IN** POSITIVE EMOTION DECODING ACCURACY

Konstantinos Kafetsios<sup>1</sup>, Andriopoulos Panoraia<sup>1</sup> & Aspasia Papachiou <sup>1</sup>University of Crete

## ATTACHMENT AND ATTENTIONAL BIASES FOR FACIAL EXPRESSIONS OF DISGUST

Maren Westphal<sup>1</sup>, George A. Bonanno<sup>2</sup> & Anthony Mancini<sup>1</sup> <sup>1</sup>Pace University, <sup>2</sup>Columbia University

# ADULT ATTACHMENT AND FACIAL **EMOTION DECODING ACCURACY: THE** MODERATING ROLE OF SOCIAL GOALS

Andriopoulos, P.<sup>1</sup> <sup>1</sup>University of Crete

14:30-16:30 **DOROTHEENSTRASSE 24** Room 1.102

#### Symposium 2.2

# **THE GRID PARADIGM: A PRINCIPLED** MULTIDISCIPLINARY APPROACH TO **ASSESS THE MEANING OF EMOTION** WORDS

**Chairs**: Johnny R.J. Fontaine<sup>1</sup> Klaus R. Scherer<sup>2</sup>, Cristina Soriano<sup>2</sup> & Anna Ogarkova<sup>3</sup> <sup>1</sup>Ghent University, <sup>2</sup>Swiss Center for Affective Sciences, <sup>3</sup>University of Kent

# MEASURING THE COMPONENTIAL **MEANING PROFILES OF EMOTION WORDS ACROSS LANGUAGES: A THEORY-BASED APPROACH**

Klaus R. Scherer<sup>1</sup> <sup>1</sup>Swiss Center for Affective Sciences

## EQUIVALENCE AND CULTURAL AND LINGUISTIC VARIATION IN THE MEANING **OF EMOTION WORDS**

Johnny R. J. Fontaine<sup>1</sup>, Klaus R. Scherer<sup>2</sup> <sup>1</sup>Ghent University, <sup>2</sup>Swiss Center for Affective Sciences

### CONCEPTUAL METAPHORS AND THE GRID PARADIGM. A CASE STUDY ON 'ANGER' IN **ENGLISH AND SPANISH**

Cristina Soriano<sup>1</sup> <sup>1</sup>Swiss Center for Affective Sciences

# WHAT THE GRID CAN REVEAL ABOUT **CULTURE-SPECIFIC CONCEPTS: A CASE** STUDY OF RUSSIAN TOSKA

Anna Ogarkova<sup>1</sup>, Johnny R. J. Fontaine<sup>2</sup> & Irina Prihod'ko<sup>3</sup>

<sup>1</sup>Swiss Center for Affective Sciences, <sup>2</sup>Ghent University, <sup>3</sup>Research Department of the Institute of Philology, Kyiv National Taras Shevchenko University

14:30-16:30

**DOROTHEENSTRASSE 24** Room 1.103

# Symposium 2.3

# THE POSITIVE SIDE OF SHAME

**Chairs**: Roger Giner-Sorolla<sup>1</sup> Ilona de Hooge<sup>2</sup>, Nicolay Gausel<sup>3</sup> & Sana Sheikh<sup>4</sup> <sup>1</sup>University of Kent,<sup>2</sup>Rotterdam School of Management, Erasmus University, <sup>3</sup>University College Østfold, <sup>4</sup>University of St Andrews

# A NEW VIEW OF SHAME AND GUILT: SHAME MOTIVATES AFFILIATION AND GUILT MOTIVATES AVOIDANCE

Ilona de Hooge<sup>1</sup>, Seger M. Breugelmans<sup>2</sup>, Fieke Wagemans<sup>2</sup> & Marcel Zeelenberg<sup>2</sup> <sup>1</sup>Rotterdam School of Management, Erasmus University, <sup>2</sup>Tilburg University

# **SEEKING REVENGE OR SEEKING REPAIR:** MANIPULATING PERPETRATOR OR VICTIM FOCUS DETERMINES RESPONSES IN **RECIPROCAL INTERGROUP CONFLICT**

Nicolay Gausel<sup>1</sup>, Colin Wayne Leach<sup>2</sup>, Agostino Mazziotta<sup>3</sup> & Friederike Feuchte<sup>4</sup> <sup>1</sup>University College Østfold, <sup>2</sup>University of Connecticut, <sup>3</sup>University of Hagen, <sup>4</sup>University of Rostock

### CULTURAL VARIATIONS IN THE MORAL **STATUS OF SHAME**

Sana Sheikh<sup>1</sup> <sup>1</sup>University of St Andrews

# SHAME AND GUILT AS INTERNALIZED SOCIAL MODELS

Roger Giner-Sorolla<sup>1</sup> <sup>1</sup>University of Kent

14:30-16:30

**DOROTHEENSTRASSE 24** Room 1.204

# Symposium 2.4

# ADVANCES IN UNDERSTANDING **DEPRESSIVE RUMINATION**

**Chairs**: Ernst H.W. Koster<sup>1</sup> Igor Marchetti<sup>1</sup>, Lin Fang<sup>1</sup>, Christine Kühner<sup>2</sup> & Ernst Koster<sup>1</sup> <sup>1</sup>Ghent University, <sup>2</sup>Zi-Mannheim

# FROM DAYDREAMING TO DEPRESSIVE SYMPTOMS: A NEUROCOGNITIVE **HYPOTHESIS**

Igor Marchetti<sup>1</sup> & Ernst Koster<sup>1</sup> <sup>1</sup>Ghent University

# A DYNAMIC SYSTEM ANALYSIS OF THE **EFFECT OF MOOD AND RUMINATION IN REMITTED DEPRESSION**

Lin Fang<sup>1</sup>, Ernst Koster<sup>1</sup>, Igor Marchetti<sup>1</sup> & Christine Kühner<sup>2</sup> <sup>1</sup>Ghent University, <sup>2</sup>Zi-Mannheim

# NEUROBIOLOGICAL CORRELATES OF **DAILY-LIFE RUMINATION IN REMITTED DEPRESSED AND HEALTHY INDIVIDUALS**

Christine Kühner<sup>1</sup>, Vera Zamoscik<sup>2</sup>, Ulrich Ebner-Priemer<sup>3</sup>, Silke Huffziger<sup>1</sup> & Peter Kirsch<sup>2</sup> <sup>1</sup>Zi-Mannheim, <sup>2</sup>Medical Faculty Mannheim/ Heidelberg University, <sup>3</sup>Karlsruhe Institute for Technology

# THE MOMENTARY RUMINATIVE SELF FOCUS INVENTORY: A NEW MEASURE OF STATE RUMINATION

Ernst Koster<sup>1</sup>, Igor Marchetti<sup>1</sup> & Nilly Mor<sup>2</sup> <sup>1</sup>Ghent University, <sup>2</sup>Hebrew University

14:30-16:30

**DOROTHEENSTRASSE 24** Room 1.205

# Paper Session 2.1 "SELF REGULATION"

# **ARE APPROACH-AVOIDANCE OF THE RELEVANT CUES EMOTIONAL USER EXPERIENCE? CASE STUDIES WITH INNOVATIVE PRODUCTS**

Damien Dupré<sup>1</sup>, Michel Dubois<sup>1</sup>, Anna Tcherkassof<sup>1</sup> & Pascal Pizelle<sup>2</sup> <sup>1</sup>Laboratoire Interuniversitaire de Psychologie, <sup>2</sup>IXIADE

# CAN AUTOMATIC INTERPERSONAL **EMOTION REGULATION BE INSTIGATED VIA** THE USE OF THE SCRAMBLED SENTENCE TASK?

Daria Naieli Hernandez Ibar<sup>1</sup> <sup>1</sup>Department of Psychology. The University of Sheffield

# LOOKING INTO THE CRYSTAL BALL OF OUR **EMOTIONAL LIVES: EMOTION REGULATION** AND THE OVERESTIMATION OF FUTURE **GUILT AND SHAME**

Wilco W. Van Dijk<sup>1</sup>, Lotte F. Van Dillen, Mark Rotteveel<sup>2</sup>, Elise C. Seip<sup>2</sup> <sup>1</sup>Leiden University, <sup>2</sup>University of Amsterdam

# UNDERSTANDING AFFECT REGULATION IN DYADS THROUGH A COMPUTATIONAL MODEL OF AFFECT REGULATION **DYNAMICS**

DavidFehler! Textmarke nicht definiert. Cameron<sup>1</sup>, Peter Totterdell<sup>1</sup> & Karen Niven<sup>2</sup> <sup>1</sup>University of Sheffield, <sup>2</sup>University of Manchester

# **EMOTION REGULATION THROUGH** ATTENTIONAL AVOIDANCE OF MOOD-CONGRUENT INFORMATION IN OLDER ADULTS

Ineke Demeyer<sup>1</sup>, Rudi De Raedt<sup>1</sup> <sup>1</sup>*Ghent University* 

# THE SUPPRESSION OF POSITIVE EMOTIONS AND ITS SOCIAL BENEFITS IN **OUTPERFORMANCE SITUATIONS**

Marina Astahova<sup>1</sup>, Sarah E. Martiny<sup>1</sup> & Thomas Goetz<sup>1</sup> <sup>1</sup>University of Konstanz

#### 16:30-17:00

**DOROTHEENSTRASSE 24** Foyer

#### **Coffee Break**

#### 17:00-18:00

UNTER DEN LINDEN 6 Audimax

#### Key Note II

### **PROTESTERS AS ''PASSIONATE ECONOMISTS''**

Martijn Van Zomeren

18:00-19:00

**UNTER DEN LINDEN 6** Senatssaal

Wine and Poster Session II

# **PROGRAM SCHEDULE** Friday, March 28

#### 8:00-18:30

**DOROTHEENSTRASSE 24** Fover

**Registration Open** 

9:00-10:00

**UNTER DEN LINDEN 6** Audimax

Key Note III

#### **ON THE DEFINITION OF EMOTIONS: A PROPOSED SOLUTION**

Rainer Reisenzein

10:00-10:30

**DOROTHEENSTRASSE 24** Foyer

Coffee Break

10:30-12:30

**DOROTHEENSTRASSE 24** Room 1.101

#### Symposium 3.1

# PSYCHOPHYSIOLOGY AND PATHOLOGY **OF EMOTION PERCEPTION AND PRODUCTION**

**Chairs**: Laura Kaltwasser<sup>1</sup> Annekathrin Schacht<sup>2</sup>, Mareike Bayer<sup>2</sup>, Guillermo Recio<sup>1</sup>, Janina Künecke<sup>1</sup> <sup>1</sup> Humboldt-Universität zu Berlin, <sup>2</sup>Georg-August-Universität Göttingen,

#### **EARLY EFFECTS OF EMOTION IN EVENT-RELATED BRAIN POTENTIALS (ERPS) ARE BASED ON LEARNED ASSOCIATIONS**

Annekathrin Schacht<sup>1</sup>, Mareike Bayer<sup>1</sup> & Werner Sommer<sup>2</sup> <sup>1</sup>University of Goettingen, <sup>2</sup>Humboldt-Universität zu Berlin

### **EVENT-RELATED BRAIN RESPONSES TO EMOTIONAL WORDS, PICTURES AND FACES:** A CROSS-DOMAIN COMPARISON

Mareike Bayer<sup>1</sup>, Werner Sommer<sup>2</sup> & Annekathrin Schacht<sup>1</sup> <sup>1</sup>Georg-August-Universität Göttingen, <sup>2</sup>Humboldt-Universität zu Berlin

## **EXECUTIVE CONTROL IN THE PRODUCTION** OF FACIAL EXPRESSIONS OF EMOTION

Guillermo Recio<sup>1</sup>, Olga Shmuilovich & Werner Sommer <sup>1</sup>Humboldt-Universität zu Berlin

### **EMOTION PROCESSING IN PSYCHOPATHY:** EVIDENCE FROM FACIAL EMG DURING **EMOTION PERCEPTION**

Janina Künecke<sup>1</sup>, Sally Olderbak<sup>2</sup>, Oliver Wilhelm<sup>2</sup>, Andreas Mokros<sup>3</sup> & Joachim Nietschke<sup>4</sup>

<sup>1</sup>Humboldt-Universität zu Berlin, <sup>2</sup>University of Ulm, <sup>3</sup>Psychiatrische Universitätsklinik Zürich, <sup>4</sup>Klinik für Forensische Psychiatrie, Ansbach

# **ON THE RELATIONSHIP OF EMOTIONAL ABILITIES AND PROSOCIAL BEHAVIOR**

Laura Kaltwasser<sup>1</sup>, Andrea Hildebrandt<sup>1</sup>, Oliver Wilhelm<sup>2</sup> & Werner Sommer<sup>1</sup> <sup>1</sup>Humboldt-Universtität zu Berlin. Berlin School of Mind & Brain, <sup>2</sup>Universität Ulm

10:30-12:30

**DOROTHEENSTRASSE 24** Room 1.102

#### Paper Session 3.1

# "MORALITY AND EMPATHY"

#### **CLARIFYING THE ROLE OF AFFECT IN** MORAL DILEMMA JUDGMENTS

Paul Conway<sup>1</sup>, Bertram Gawronski<sup>2</sup> <sup>1</sup>The University of Cologne, <sup>2</sup>University of Texas at Austin

#### MORAL EMOTIONS IN DAILY LIFE

Wilhelm Hofmann<sup>1</sup>, Linda Skitka<sup>2</sup>, Dan Wisneski<sup>2</sup> & Mark Brandt<sup>3</sup> <sup>1</sup>University of Cologne, <sup>2</sup>University of Illinois at Chicago, <sup>3</sup>Tilburg University

#### MORE THAN COMPASSION: THE MODERATING ROLE OF EMPATHIZED **EMOTION ON DIFFERENT**

Claudia Sassenrath<sup>1</sup> & Johannes Keller<sup>1</sup> <sup>1</sup>University of Ulm

# **OTHER-ORIENTED EMPATHY AND** PERSONAL COSTS FOR HELPING: THE MODERATING ROLE OF SIMILARITY PERCEPTIONS

Birte Siem<sup>1</sup> & Stefan Stürmer <sup>1</sup>FernUniversität Hagen

# HOW PEOPLE'S EVERYDAY WORLDS FACILITATE EMOTIONS: CULTURAL PRACTICES, PRODUCTS, AND MEANINGS OF ANGER AND SHAME IN THE UNITED STATES **AND BELGIUM**

Michael Boiger<sup>1</sup>, Simon De Deyne<sup>1</sup> & Batja Mesquita<sup>1</sup> <sup>1</sup>University of Leuven

# TOWARDS A UNIVERSAL SCALE TO **MEASURE SELF-REPORTED ODOR-RELATED FEELINGS**

Sylvain Delplanque<sup>1</sup>, Camille Ferdenzi<sup>1</sup>, Christelle Porcherot<sup>2</sup> & Isabelle Cayeux <sup>1</sup>University of Geneva, <sup>2</sup>Firmenich SA

#### 10:30-12:30

**DOROTHEENSTRASSE 24** Room 1.103

#### Symposium 3.2

# THE INTERACTION BETWEEN NORMS AND EMOTIONS ACROSS CULTURES

**Chairs**: Marc Heerdink<sup>1</sup> Jozefien De Leersnyder<sup>2</sup>, Eftychia Stamkou<sup>1</sup> & Yvette Van Osch<sup>3</sup>, Shlomo Hareli<sup>4</sup> <sup>1</sup> University of Amsterdam <sup>2</sup>University of Leuven, <sup>3</sup>Tilburg University, <sup>4</sup>University of Haifa

# **CONCERNED ABOUT AUTONOMY, RELATEDNESS OR BOTH? HOW BELGIAN** AND TURKISH NORMS SHAPE TURKISH-**BELGIANS' EMOTIONS DURING SOCIAL INTERACTIONS**

Jozefien De Leersnyder<sup>1</sup> & Batja Mesquita<sup>1</sup> <sup>1</sup>University of Leuven

## HOW DO EMOTIONAL REACTIONS TO NORM VIOLATIONS DIFFER ACROSS CULTURES?

Eftychia Stamkou<sup>1</sup>, Gerben Van Kleef<sup>1</sup>, Astrid Homan<sup>1</sup> & Michele Gelfand<sup>2</sup> <sup>1</sup>University of Amsterdam, <sup>2</sup>University of Maryland

## CONTEXT SENSITIVITY OF THE PRIDE **EXPRESSION**

Yvette Van Osch<sup>1</sup>, Seger Breugelmans & Marcel Zeelenberg <sup>1</sup>Tilburg University

## **EMOTIONS AS SIGNALS OF NORMATIVE** CONDUCT

Shlomo Hareli<sup>1</sup> <sup>1</sup>University of Haifa

## LEARNING ABOUT NORMS BY OBSERVING (MORAL) EMOTIONAL INTERACTIONS

Marc Heerdink<sup>1</sup>, Lukas Koning & Gerben Van Kleef<sup>1</sup> <sup>1</sup>University of Amsterdam

10:30-12:30

**DOROTHEENSTRASSE 24** Room 1.204

# Symposium 3.3

# IN THE FACE OF THREAT

**Chairs**: Hedwig Eisenbarth<sup>1</sup> Matthias Wieser<sup>2</sup>, Marie-Anne Van der Hasselt<sup>3</sup> & Luna C. Munoz Centifanti<sup>4</sup> <sup>1</sup>University of Colorado Boulder, <sup>2</sup>University of Wuerzburg, <sup>3</sup>Genth University, <sup>4</sup>University of Durham

# **CONTEXT COUNTS IN LARGE AMOUNTS: -**THE INFLUENCE OF THREATENING **CONTEXT VARIABLES ON THE PERCEPTION** AND NEURAL PROCESSING OF FACES

Matthias Wieser<sup>1</sup> <sup>1</sup>University of Wuerzburg

# THE TEMPORAL DYNAMICS OF EMOTIONS: THE ROLE OF EMOTION ANTICIPATION

Marie-Anne Vanderhasselt<sup>1</sup>, Jonathan Remue<sup>1</sup>, Sven Mueller<sup>1</sup> & Rudi De Raedt<sup>1</sup> <sup>1</sup>Ghent University

# **MAPPING THE AUTONOMIC SPACE:** CARDIOVASCULAR PSYCHOPHYSIOLOGY, **EMOTION RECOGNITION, AND CALLOUS-UNEMOTIONAL TRAITS IN BOYS**

Luna C. Munoz Centifanti<sup>1</sup> <sup>1</sup>University of Durham

# EMOTIONAL FACIAL EXPRESSIONS IN THE THREATENING EYE: BEHAVIORAL AND PHYSIOLOGICAL REACTIONS OF **PSYCHOPATHIC INDIVIDUALS**

Hedwig Eisenbarth<sup>1</sup> <sup>1</sup>University of Colorado Boulder

# 10:30-12:30

**DOROTHEENSTRASSE 24** Room 1.205

Paper Session 3.2

"GROUP AND CONFLICT"

# **EMOTION PRIMING WITH SPATIAL FREQUENCY FILTERED PRIMES UNDER** MASKED AND UNMASKED PRESENTATION **CONDITIONS**

Michaela Rohr<sup>1</sup> & Dirk Wentura<sup>1</sup> <sup>1</sup>Saarland University

# TO COME TOGETHER OR TO FALL APART: HUMILIATION AND AFFILIATION DURING **INITIATION RITUALS**

Liesbeth Mann<sup>1</sup>, Allard Feddes<sup>1</sup>, Bertjan Doosje<sup>1</sup> & Agneta Fischer<sup>1</sup> <sup>1</sup>University of Amsterdam

# FEAR OF THE OFFENDER AS A POSITIVE PREDICTOR OF PARTICIPATION IN VICTIM-**OFFENDER MEDIATION?**

Sven Zebel<sup>1</sup> <sup>1</sup>University of Twente

# MOTIVATED EMOTING IN INTERGROUP **CONTEXTS: EMOTIONAL PREFERENCES,** EMOTIONAL EXPERIENCES, AND POLITICAL **DECISIONS IN INTRACTABLE CONFLICT**

Roni Porat<sup>1</sup>, Eran Halperin<sup>2</sup> & Maya Tamir<sup>1</sup> <sup>1</sup>The Hebrew University, <sup>2</sup>The InterDisciplinary Center

### EMOTION EXPRESSION DEPENDS ON THE AUDIENCE: PLAYING IT UP OR PLAYING IT **DOWN?**

Julia Sasse<sup>1</sup>, Russell Spears<sup>1</sup> & Ernestine H. Gordijn<sup>1</sup> <sup>1</sup>University of Groningen

# **BELIEF IN A CHANGING WORLD INDUCES** HOPE AND PROMOTES PEACE IN **INTRACABLE CONFLICTS**

Smadar Cohen-Chen<sup>1,2</sup>, Richard J. Crisp<sup>1</sup>, Eran Halperin<sup>2</sup> <sup>1</sup>University of Sheffield, <sup>2</sup>Interdisciplinary Center Herzliya, Israel

12:30-14:00

UNTER DEN LINDEN 6 Senatssaal

Lunch and Poster Session III

14:00-16:00

**DOROTHEENSTRASSE 24** Room 1.101

Paper Session 4.1

# "PSYCHOPATHOLOGY"

# ACUTE LONELINESS AND SOCIAL **BEHAVIORS IN A VIRTUAL SOCIAL ENVIRONMENT**

Maike Luhmann<sup>1</sup>, Felix Schönbrodt<sup>2</sup>, Louise C. Hawkley<sup>3</sup> & John T. Cacioppo <sup>1</sup>University of Illinois at Chicago, <sup>2</sup>Ludwig-Maximilians-Universität München, <sup>3</sup>University of Chicago

# **EMPATHY DEFICITS IN ADOLESCENT** MALES WITH ADHD AND CONDUCT DISORDER

Kelly Main<sup>1</sup>, Anita Thapar<sup>1</sup>, Kate Langley<sup>1,2</sup> & Stephanie Van Goozen<sup>1</sup> <sup>1</sup>School of Psychology, Cardiff University

# ATTENTION TO EMOTION ACROSS THE SPECTRUM OF AUTISM

Pip Griffiths<sup>1</sup> & Chris Ashwin<sup>1</sup> <sup>1</sup>University of Bath

# DON'T MESS WITH MISTER IN-BETWEEN: **INTERPLAY OF FACIAL FEATURES AND PROCESSING FLUENCY IN SOCIAL EVALUATION**

Michal Olszanowski<sup>1</sup>, Piotr Winkielman<sup>2</sup>, Mateusz Gola<sup>1</sup> & Olga Kaminska<sup>1</sup> <sup>1</sup>University of Social Sciences & Humanities, Warsaw, <sup>2</sup>University of California, San Diego

# **EMOTION RECOGNITION IN CHILDREN** WITH ATTENTION-DEFICIT HYPERACTIVITY DISORDER

Roberto Gutierrez<sup>1</sup>, Amy Garrod<sup>2</sup>, Kate Lawrence<sup>2</sup> & Amanda Ludlow<sup>2</sup> <sup>1</sup>Anglia Ruskin University <sup>2</sup>University of **Birmingham** 

# PRIDE AND SHAME IN SOCIAL ANXIETY

Eva Gilboa-Schechtman<sup>1</sup>, Iris Shachar<sup>1</sup>, Yael Goern<sup>1</sup> & Hadar Keshet<sup>1</sup> <sup>1</sup>Bar-Ilan University

14:00-16:00

**DOROTHEENSTRASSE 24** Room 1.102

#### Paper Session 4.2

## **"EMOTION COMMUNICATION"**

#### **EMOTION IN VISUAL WORD PROCESSING -**FROM LINGUISTIC TO CLINICAL AND SOCIAL RELEVANCE

Johanna Kissler<sup>1</sup> <sup>1</sup>University of Bielefeld

#### **EMOTIONAL MIMICRY: THE ROLE OF EXPECTED EMOTIONS**

Agneta Fischer<sup>1</sup> <sup>1</sup>University of Amsterdam

#### VALIDITY OF THE GENEVA EMOTION **RECOGNITION TEST (GERT)**

Katja Schlegel<sup>1</sup>, Didier Grandjean<sup>1</sup> & Klaus R. Scherer<sup>1</sup> <sup>1</sup>Swiss Center for Affective Sciences, University of Geneva

#### FACIAL EXPRESSIONS COMMUNICATE **BOTH APPRAISALS AND EMOTIONS**

Marcello Mortillaro<sup>1</sup>, Irene Rotondi<sup>1</sup> & Klaus Scherer <sup>1</sup>Swiss Center for Affective Sciences - University of Geneva

## EMOTION CATEGORIES AND DIMENSIONS IN THE FACIAL COMMUNICATION OF **AFFECT: AN INTEGRATED APPROACH**

Marc Mehu<sup>1</sup> & Klaus Scherer<sup>2</sup> <sup>1</sup>Webster University Vienna, <sup>2</sup>University of Geneva

### SMILING AND CRYING: WHAT DOES IT MEAN TO JUDGE EXPRESSIONS AS "GENUINE?"

Eric Vanman<sup>1</sup> & Mari Horiguchi<sup>2</sup> <sup>1</sup>University of Queensland, <sup>2</sup>Monash University

#### 14:00-16:00

**DOROTHEENSTRASSE 24** Room 1.103

#### Symposium 4.1

# **MULTILEVEL EXPLANATIONS OF THE** SOCIALITY OF EMOTION

**Chairs**: Tobias Schröder<sup>1</sup>. Christian von Scheve<sup>2</sup>, Gesche Schauenburg<sup>2</sup>, Jens Ambrasat<sup>2</sup> & David Schmidtke<sup>2</sup> <sup>1</sup>University of Waterloo, <sup>2</sup>Freie Universität Berlin

### AFFECT CONTROL THEORY AND THE SOCIALITY OF EMOTION

Christian von Scheve<sup>1</sup> <sup>1</sup>FU Berlin, Department of Sociology

# **EMOTIONS AS SEMANTIC POINTERS:** CONSTRUCTIVE NEURAL MECHANISMS

Tobias Schröder<sup>1</sup> <sup>1</sup>University of Waterloo

# **EEG CORRELATES OF AFFECTIVE PROCESSING OF SOCIAL INTERACTIONS**

Gesche Schauenburg<sup>1</sup>, Markus Conrad<sup>2</sup>, Didier Grandjean<sup>3</sup> <sup>1</sup>Freie Universität Berlin, Cluster Languages of Emotion, <sup>2</sup>University of La Laguna, Facultad de Psicología, <sup>3</sup>NEAD – Swiss Center for Affective Science – University of Geneva

# **AFFECTIVE MEANINGS AND THE** DEPENDENCE OF EMOTIONS ON SOCIAL **STRUCTURE**

Jens Ambrasat<sup>1</sup> <sup>1</sup>Freie Universität Berlin, Cluster Languages of Emotion

## WHAT DO AFFECTIVE NORMS FOR WORDS **TELL US ABOUT CULTURES? A COMPARISON OF ENGLISH, GERMAN, AND SPANISH**

David Schmidtke<sup>1</sup> & Markus Conrad <sup>1</sup>*Freie Universität Berlin, FB* Erziehungswissensch. & Psychol., University of La Laguna, Facultad de Psicología

### 14:00-16:00

**DOROTHEENSTRASSE 24** Room 1.204

# Symposium 4.2

# **TOO LITTLE OR TOO MUCH** FLEXIBILITY IN THOUGHTS AND FEELINGS: ASSOCIATIONS WITH **PSYCHOLOGICAL HEALTH AND WELL-BEING IN DAILY LIFE**

**Chairs**: Annette Brose<sup>1</sup> & Peter Koval<sup>1</sup> Cornelia Wrzus<sup>2</sup>, Keisuke Takano<sup>1</sup>, Ulrich Ebner-Priemer<sup>3</sup>

<sup>1</sup>KU Leuven, <sup>2</sup>Johannes-Gutenberg University Mainz, <sup>3</sup>Karlsruhe Institute for Technology

#### 'GETTING STUCK' IN DEPRESSION: THE **ROLES OF RUMINATION AND EMOTIONAL INERTIA**

Peter Koval<sup>1</sup>, Peter Kuppens<sup>1</sup>, Nicholas Allen<sup>2</sup> & Lisa Sheeber<sup>3</sup> <sup>1</sup>KU Leuven, <sup>2</sup>University of Melbourne, <sup>3</sup>Oregon **Research** Institute

# **EMOTIONAL INERTIA AND RUMINATION:** FURTHER EVIDENCE FOR THEIR UNIOUE AND SHARED RELEVANCE FOR DEPRESSIVE **SYMPTOMS**

Annette Brose<sup>1</sup>, Peter Koval<sup>1</sup>, Florian Schmiedek<sup>2</sup> & Peter Kuppens<sup>1</sup> <sup>1</sup>KU Leuven, <sup>2</sup>German Institute for International Educational Research

# **AGE-RELATED DIFFERENCES IN AFFECTIVE RESPONSES TO DAILY HASSLES RELATE TO ELAPSED TIME AND PREOCCUPATION**

Cornelia Wrzus<sup>1</sup>, Gloria Luong<sup>2</sup>, Gert Wagner<sup>3</sup> & Michaela Riediger<sup>4</sup> <sup>1</sup>Johannes-Gutenberg University Mainz, <sup>2</sup>Max Planck Institute for Human Development, <sup>3</sup>German Institute for Economic Research, <sup>4</sup>Max Planck Institute for Human Development

# ESM RESEARCH ON RUMINATION AND **SLEEP DISTURBANCE**

Keisuke Takano<sup>1</sup>, Shinji Sakamoto<sup>2</sup>, Yoshihiko Tanno<sup>3</sup> <sup>1</sup>KU Leuven, <sup>2</sup>Nihon University, <sup>3</sup>University of Tokyo

# ON THE DYNAMICAL RELATION BETWEEN AFFECT AND SELF-ESTEEM IN PSYCHIATRIC PATIENTS AND HEALTHY CONTROLS

Ulrich Ebner-Priemer<sup>1</sup>, Philip Santangelo<sup>1</sup>, Susanne Koudela-Hamila<sup>1</sup> & Martin Bohus<sup>2</sup> <sup>1</sup>Karlsruhe Institute for Technology, <sup>2</sup>Central Institute of Mental Health

14:00-16:00

**DOROTHEENSTRASSE 24** Room 1.205

## Paper Session 4.3

# "ANGER AND ENVY"

### WHAT CATCHES THE ENVIOUS EYE? HOW MALICIOUS AND BENIGN ENVY BIAS **ATTENTION**

Jan Crusius<sup>1</sup> & Jens Lange <sup>1</sup>University of Cologne

#### **DISPOSITIONAL ENVY: CONCEPTUAL AND EMPIRICAL CONSIDERATIONS**

Katrin Rentzsch<sup>1</sup> <sup>1</sup>University of Bamberg, Department of Psychology

# EVIDENCE THAT PROSOCIALITY FOLLOWING ANGER IS GOAL DIRECTED

Janne Van Doorn<sup>1</sup>, Seger Breugelmans<sup>1</sup> & Marcel Zeelenberg<sup>1</sup> <sup>1</sup>Tilburg University

## ARE LEFTISTS MORE HOT-HEADED THAN **RIGHTISTS? THE INTERACTIVE INFLUENCE** OF IDEOLOGY AND EMOTIONS ON SUPPORT FOR POLICIES

Ruthie Pliskin<sup>1</sup>, Eran Halperin<sup>2</sup>, Gal Sheppes<sup>1</sup> & Daniel Bar-Tal<sup>1</sup> <sup>1</sup>Tel Aviv University, <sup>2</sup>Interdisciplinary Center Herzliya

# **EMOTIONS OF ANGER IN POLITICAL SCANDALS**

Monika Verbalyte<sup>1</sup> <sup>1</sup>*Free University Berlin* 

# PERCEIVING ANGRY FACIAL EXPRESSIONS: CONSEQUENCES FOR APPROACH-**AVOIDANCE RESPONSES**

Regina Reichardt<sup>1</sup> & Roland Deutsch<sup>2</sup> <sup>1</sup>University of Wuerzburg, <sup>2</sup>Technische Universitaet Dresden

#### 16:00-16:30

**DOROTHEENSTRASSE 24** Foyer

Coffee Break

#### 16:30-18:30

**DOROTHEENSTRASSE 24** Room 1.101

# Symposium 5.1

# NARRATIVE QUALITIES OF EMOTIONS

**Chairs**: Tilmann Habermas<sup>1</sup> <sup>1</sup>Goethe University Frankfurt

## ANGER NARRATIVES VERSUS FEAR NARRATIVES – DIFFERENCES IN NARRATIVE QUALITIES

Barbara Maier<sup>1</sup> <sup>1</sup>Goethe University Frankfurt

# **EMOTIONS IN DREAM AND EVERYDAY-LIFE NARRATIVES**

Susanne Döll-Hentschker<sup>1</sup>, Carla Messmann<sup>1</sup>, Carina Rüger<sup>1</sup> & Margitta Rode <sup>1</sup>Goethe-Universität Frankfurt

# THE NARRATIVE CONTEXT OF CRYING

Cord Benecke<sup>1</sup> <sup>1</sup>Universitaet Kassel

# **TEMPORAL STRUCTURE OF NARRATIVES AS** AN INDICATOR OF THE RELIVING OF PAST **EMOTIONAL EPISODES**

Tibor Polva<sup>1</sup> <sup>1</sup>Institute of Cognitive Neuroscience and Psychology, Budapest

# HOW NARRATIVE PERSPECTIVE INFLUENCES EMPATHETIC AND INTERACTIONAL LISTENER RESPONSES

Tilmann Habermas<sup>1</sup>, Josefine Foerster<sup>1</sup>, Karin Lingg<sup>1</sup> & Stephan Bongard<sup>1</sup> <sup>1</sup>Goethe University Frankfurt

# 16:30-18:30

**DOROTHEENSTRASSE 24** Room 1.102

# Symposium 5.2

# SOCIAL DYNAMICS OF EMOTIONS IN **GROUPS AND TEAMS**

**Chairs**: Ellen Delvaux<sup>1</sup> & Batja Mesquita Karen Niven<sup>2</sup>, Gerben A. Van Kleef<sup>3</sup> & Nale Lehmann-Willenbrock<sup>4</sup> & Zhike Lei<sup>5</sup> <sup>1</sup>University of Leuven, <sup>2</sup> Manchester Business School, University of Manchester, <sup>3</sup>University of Amsterdam, <sup>4</sup>VU University of Amsterdam, <sup>5</sup>ESMT European School of Management and Technology, Berlin

# WE ARE PRIDE OF US, I AM PRIDE OF **MYSELF: TWO LONGITUDINAL STUDIES IN** SMALL, INTERACTIVE TASK GROUPS

Ellen Delvaux<sup>1</sup>, Loes Meeussen<sup>1</sup> & Batja Mesquita<sup>1</sup> <sup>1</sup>University of Leuven

### **BECOMING POPULAR: INTERPERSONAL** EMOTION REGULATION PREDICTS CENTRALITY IN NEW SOCIAL NETWORKS

#### Karen Niven<sup>1</sup>, Per Block<sup>2</sup>,

Ilmo Van der Lowe<sup>3</sup> & Warren Mansell<sup>4</sup> <sup>1</sup>Manchester Business School, University of Manchester, <sup>2</sup>Department of Sociology, University of Oxford, <sup>3</sup>Department of Psychology, University of Cambridge, <sup>4</sup>School of Psychological Sciences, University of Manchester

# THE INFLUENCE OF SPORTS COACHES' EMOTIONAL EXPRESSIONS ON TEAM **MEMBERS' EMOTIONS, MOTIVATION, AND** PERFORMANCE

Gerben A. Van Kleef<sup>1</sup>, Arik Cheshin<sup>1</sup> & Lukas F. Koning<sup>1</sup> <sup>1</sup>University of Amsterdam, <sup>2</sup>Karlsruhe Institute for Technology

# HOW AND WHEN HUMOR PATTERNS EMERGE AND IMPACT TEAM PERFORMANCE

Nale Lehmann-Willenbrock<sup>1</sup> & Joseph A. Allen<sup>2</sup> <sup>1</sup>VU University of Amsterdam, <sup>2</sup>University of Nebraska at Omaha

# **CONTAGIOUS PEERS: PEER AFFECTIVE** VALENCE AS AN ASSET OR A LIABILITY IN **PROBLEM SOLVING TEAMS?**

Zhike Lei<sup>1</sup> & Nale Lehmann-Willenbrock<sup>2</sup> <sup>1</sup>ESMT European School of Management and Technology, Berlin, <sup>2</sup>VU University of Amsterdam 16:30-18:00

**DOROTHEENSTRASSE 24** Room 1.103

#### Symposium 5.3

# **AFFECT ACROSS THE LIFE-SPAN: EMOTIONAL COMPETENCIES AND** DYNAMICS FROM ADOLESCENCE TO **OLD AGE**

**Chairs**: Gloria Luong<sup>1</sup> & Michaela Riediger<sup>1</sup> Elisabeth Blanke<sup>1</sup>, Cornelia Wrzus<sup>2</sup>, Kathrin Klipker<sup>1</sup> & Michaela Riediger<sup>1</sup> <sup>1</sup>Max Planck Institute for Human Development, <sup>2</sup>Johannes-Gutenberg University

# **READING OTHERS' THOUGHTS AND** FEELINGS - AGE DIFFERENCES IN SOCIAL **IMPLICATIONS**

Elisabeth Blanke<sup>1</sup>, Antje Rauers<sup>1</sup> & Michaela Riediger<sup>1</sup> <sup>1</sup>Max Planck Institute for Human Development

# **APPRAISALS OF NEGATIVE AFFECT** DAMPEN THE LINKS BETWEEN NEGATIVE **AFFECT AND WELL-BEING**

Gloria Luong<sup>1</sup>, Michaela Riediger<sup>1</sup>, Cornelia Wrzus<sup>2</sup> & Gert Wagner<sup>3</sup> <sup>1</sup>Max Planck Institute for Human Development, <sup>2</sup>Johannes-Gutenberg University, <sup>3</sup>German Institute for Economic Research

## **AGE-RELATED DIFFERENCES IN REACTIVITY TO AND RECOVERY FROM EMOTIONAL STRAIN: DISTINCT PATTERNS** FOR NEGATIVE AFFECT AND HEART RATE

Cornelia Wrzus<sup>1</sup>, Victor Müller<sup>2</sup>, Gert Wagner<sup>3</sup>, Ulman Lindenberger<sup>1</sup> & Michaela Riediger<sup>1</sup> <sup>1</sup>Johannes-Gutenberg University, <sup>2</sup>Max Planck Institute for Human Development, <sup>3</sup>German Institute for Economic Research

# LONGITUDINAL CHANGE IN EVERYDAY AFFECTIVE EXPERIENCES AND VARIABILITY: FROM ADOLESCENCE TO **OLD AGE**

Michaela Riediger<sup>1</sup>, Manuel Voelkle<sup>1</sup>, Gloria Luong<sup>1</sup>, Cornelia Wrzus<sup>2</sup> & Gert Wagner<sup>3</sup> <sup>1</sup>Max Planck Institute for Human Development, <sup>2</sup>Johannes-Gutenberg University, <sup>3</sup>German Institute for Economic Research

#### 16:30-18:30

**DOROTHEENSTRASSE 24** Room 1.204

# Symposium 5.4

# "I FEEL BETTER BUT I DON'T KNOW WHY": IMPLICIT EMOTION **REGULATION AS A KEY TO EMOTIONAL ADAPTATION**

Chairs: Susanne Schwager<sup>1</sup>, Sander L. Koole<sup>2</sup> and Klaus Rothermund<sup>1</sup> Julia Vogt<sup>3</sup>, Thomas Webb<sup>4</sup> & Nils Jostmann<sup>5</sup>

<sup>1</sup>FSU Jena, Germany, <sup>2</sup>VU University Amsterdam, <sup>3</sup>University of Reading, <sup>4</sup>University of Sheffield, <sup>5</sup>University of Amsterdam

# ON THE DYNAMICS OF IMPLICIT EMOTION **REGULATION: COUNTER-REGULATION** AFTER REMEMBERING EVENTS OF HIGH BUT NOT OF LOW EMOTIONAL INTENSITY

Susanne Schwager<sup>1</sup> & Klaus Rothermund<sup>1</sup> <sup>1</sup>Friedrich Schiller University

# **AUTOMATIC ATTENTIONAL PROCESSES** SERVE THE REGULATION OF AVERSIVE **EMOTIONS**

Julia Vogt<sup>1</sup> <sup>1</sup>University of Reading

# AUTOMATIC CONTROL OF NEGATIVE **EMOTIONS: EVIDENCE THAT STRUCTURED** PRACTICE INCREASES THE EFFICIENCY OF **EMOTION REGULATION**

Thomas Webb<sup>1</sup>, Spyros Christou-Champi<sup>2</sup> & Tom Farrow<sup>1</sup> <sup>1</sup>University of Sheffield, <sup>2</sup>University of Cyprus

# **GUIDED BY VOICES: ACTION VERSUS STATE ORIENTATION MODERATES MOOD CONTAGION BY AUDITORY CUES**

Nils Jostmann<sup>1</sup> & Disa Sauter<sup>1</sup> <sup>1</sup>University of Amsterdam

# **EMBODIED ANGER MANAGEMENT: BODILY** EXPERIENCES ASSOCIATED WITH **AVOIDANCE IMPLICITLY REDUCE ANGER** AND AGGRESSION AMONG INDIVIDUALS WITH HIGH TRAIT ANGER

Sander Koole<sup>1</sup>, Lotte Veenstra<sup>1</sup>, Iris Veenstra<sup>1</sup>, Brad Bushman<sup>2</sup> & Irena Domachowska<sup>3</sup> <sup>1</sup>VU University Amsterdam, <sup>2</sup>Ohio State University, <sup>3</sup>Technische Universität Dresden

# 16:30-18:30

**DOROTHEENSTRASSE 24** Room 1.205

# Paper Session 5.1

# "HOW TO BE HAPPY: POSITIVE AND **NEGATIVE EMOTIONS"**

# A PROTOCOL FOR STUDYING THE IMPACT OF POSITIVE VS. NEGATIVE EMOTIONS ON A PREDEFINED SEQUENCE OF FULL-BODY **MOVEMENTS**

Tom Giraud<sup>1</sup>, Virginie Demulier<sup>1</sup>, Florian Focone<sup>1</sup>, Brice Isableu<sup>2</sup> & Jean Claude Martin<sup>1</sup> <sup>1</sup>LIMSI-CNRS, <sup>2</sup>UFR STAPS - Université Paris Sud

## DWELLING ON THE PAST CAN MAKE MORE MISERABLE AND MORE BLESSED

Marijke Van Putten<sup>1</sup> <sup>1</sup>Leiden University

### THE MENTAL REPRESENTATION OF SMILES

Andrea Paulus<sup>1</sup>, Michaela Rohr<sup>1</sup>, Ron Dotsch<sup>2</sup> & Dirk Wentura<sup>1</sup> <sup>1</sup>Saarland University, <sup>2</sup>Radbout University Nijmegen

### HOW DEEP IS YOUR LOVE? ON THE **PROFUNDITY OF ROMANTIC LOVE**

Aaron Ben-Ze'ev<sup>1</sup> & Angelika Krebs<sup>2</sup> <sup>1</sup>Department of Philosophy, University of Haifa, <sup>2</sup>Department of Philosophy, University of Basl

## **REGULATING OTHERS, BENEFITING THE SELF: THE CASE OF INTERPERSONAL** INSTRUMENTAL EMOTION REGULATION

Liat Netzer<sup>1</sup>, Gerben A. Van Kleef<sup>2</sup> & Maya Tamir <sup>1</sup>The Hebrew University of Jerusalem, <sup>2</sup>University of Amsterdam

### **NEURO-COGNITIVE AND EMOTIONAL PROCESSING OF GARDEN-PATH JOKES**

Bastian Mayerhofer<sup>1</sup>, Annekathrin Schacht<sup>1</sup> <sup>1</sup>University of Göttingen

#### 20:00

UNTER DEN LINDEN 6 Senatssaal

Gala Dinner

# POSTER SESSIONS

# POSTER SESSION I

Thursday, March 27

13:00-14:30

UNTER DEN LINDEN 6

Senatssaal

#### **Poster Session Schedule**

08:00-08:30	Posters Assembled
08:30-13:00	Posters Available for Viewing
13:00-14:30	Authors Present for Discussion
	and Questions
14:30-15:00	Dismantle Posters

## **1. SEX DIFFERENCES IN THE RELATIONSHIP** BETWEEN EMOTIONAL INTELLIGENCE AND THEORY OF MIND

Laurie Batchelder<sup>1</sup>, Mark Brosnan<sup>1</sup> & Chris Ashwin<sup>1</sup> <sup>1</sup>University of Bath

# 2. THE ROLE OF EMOTION-SPECIFIC **RESOURCES IN CROSS-MODAL** PROCESSING OF EMOTIONAL STIMULI

Marie Bayot<sup>1</sup>, Nicolas Vermeulen<sup>1</sup> <sup>1</sup>Université catholique de Louvain

# **3. FROM FAST VISUAL PERCEPTION TO** FRONTAL EMOTIONAL INHIBITION

Brice Beffara<sup>1</sup>, Nicolas Vermeulen<sup>2</sup>, Amélie Bret & Martial Mermillod <sup>1</sup>Université Grenoble Alpes, LPNC & CNRS, LPNC UMR 515, <sup>2</sup>Psychology Department, Université catholique de Louvain (UCL)

# 4. SCOPE AND STRUCTURE OF EMOTION **TERMS IN MEDIA RECEPTION**

Flavia Bleuel<sup>1</sup> <sup>1</sup>University of the Arts Berlin

## 5. EMOTION-COGNITION-MOTRICITY **INTERACTION**

Heidi Charvin<sup>1</sup> <sup>1</sup>Normandie University

# 6. THE EFFECT OF EMPATHY ON **RECOLLECTIONS OF PARENT-CHILD RELATIONSHIPS**

Katie Daughters<sup>1</sup>, Antony Manstead<sup>1</sup>, Stephanie Van Goozen<sup>1</sup> <sup>1</sup>Cardiff University

## 7. THE ROLE OF EMOTIONS IN THE LEARNING OF SOCIAL STANDARDS

Shimon Elkabetz<sup>1</sup>, Shlomo Hareli<sup>1</sup> & Ursula Hess<sup>2</sup> <sup>1</sup>University of Haifa, <sup>2</sup>Humboldt University

# 8. THREATENING TRIANGLES: THE INFLUENCE OF ANGULAR STIMULI ON THE BREADTH OF ATTENTION

Orna Gryc<sup>1</sup>, & Shlomo Hareli<sup>1</sup> <sup>1</sup>University of Haifa

# 9. PAIN AND EMPATHY: THE EFFECT OF **SELF-ORIENTED FEELINGS ON THE DETECTION OF PAINFUL FACIAL EXPRESSIONS**

Delphine Grynberg<sup>1</sup> & Pierre Maurage<sup>1</sup> Catholic University of Louvain

# **10. THE ROLE OF EMOTION TRANSITIONS** FOR THE PERCEPTION OF SOCIAL DOMINANCE AND AFFILIATION

Shlomo Hareli<sup>1</sup>, Shlomo David<sup>1</sup> & Ursula Hess<sup>2</sup> <sup>1</sup>University of Haifa, <sup>2</sup>Humboldt-University

# **11. IMPROVING THE ABILITIES TO** PERCEIVE AND REGULATE EMOTIONS THROUGH TRAINING

Sarah Herpertz<sup>1</sup> & Astrid Schütz<sup>1</sup> <sup>1</sup>University Bamberg

# **12. BELIEVING IS SEEING: THE IMPACT OF EXPECTATIONS ON EMOTION RECOGNITION IN MINIMAL FACIAL EXPRESSIONS**

Isabell Hühnel<sup>1</sup>, Susanne Sangenstedt<sup>2</sup>, Jonas Dietrich<sup>1</sup> & Ursula Hess<sup>1</sup> <sup>1</sup>Humboldt-Universität zu Berlin. <sup>2</sup>Westfälische Wilhelms-Universität Münster

# **13. INTERACTIONS BETWEEN** PHYSIOLOGICAL AROUSAL AND **PROCESSING OF EMOTIONALLY AROUSING STIMULI**

Anne Kever<sup>1</sup>, Nicolas Vermeulen<sup>1</sup> & Coralie Eeckhout<sup>1</sup>

<sup>1</sup>Université catholique de Louvain (UCLouvain), Psychological Sciences Research Institute

# **14. PERFECTIONISM AND EMOTIONAL REACTIVITY: A MEDIATOR ROLE OF UNCONSTRUCTIVE REPETITIVE** THINKING.

Monika Kornacka<sup>1</sup> & Céline Douilliez<sup>1</sup> <sup>1</sup>PSITEC, University of Lille Nord de France

# **15. THE IMPACT OF MOTION ON THE** LIKEABILITY OF A STIMULUS

Thierry Kosinski<sup>1</sup>, Alhadi Chafi<sup>1</sup>, Paul Craddock<sup>1</sup>, Stéphane Rusinek<sup>1</sup> & Mikael Molet <sup>1</sup>University of Lille

## **16. SYNCHRONY AND FACIAL MIMICRY AS** INDICATORS OF INTERGENERATIONAL **COMMUNICATION QUALITY**

Janka Kuszynski<sup>1</sup>, Isabell Hühnel<sup>1</sup>, Ursula Hess<sup>1</sup> & Jens B. Asendorpf<sup>1</sup> <sup>1</sup>Humboldt-University Berlin

# **17. DEFENSIVE SELF. RELATIONSHIP BETWEEN SELF-EVALUATIONS AND DEFENSE MECHANISM**

Marta Kwasnik<sup>1</sup> & Alina Kolanczyk<sup>1</sup> <sup>1</sup>University of Social Sciences and Humanities, Sopot

# **18. THE CLASH OF TWO DEADLY SINS: THE** SOCIAL FUNCTIONAL RELATION OF PRIDE AND ENVY

Jens Lange<sup>1</sup> & Jan Crusius<sup>1</sup> <sup>1</sup>University of Cologne

# **19. THE MULTIPLE EMOTIONAL** SENSITIVITY SCALE (MESS)

Aurelien Le Chevanton<sup>1</sup>, Alain VomHofe<sup>1</sup>, Jean-Marie Grouin<sup>1</sup> & Heidi Charvin<sup>1</sup> <sup>1</sup>Université de Rouen

# 20. CHANGES IN BASIC BELIEFS AND POST-STRESS GROWTH: A CROSS-SECTIONAL STUDY ON THE STRONG IMPACT OF POSITIVE EVENTS ON WELL-BEING

Gonzalo Martínez-Zelava<sup>1</sup>, Silvia da Costa, Darío Páez & María de los Ángeles Bilbao<sup>2</sup> <sup>1</sup>University of Basque Country, <sup>2</sup>Pontificia Universidad Católica de Valparaíso

# 21. MUTUAL-AID SUPPORT GROUPS AND **EMOTIONAL INTELLIGENCE**

Mariagrazia Monaci<sup>1</sup> & Luca Scacchi<sup>1</sup> <sup>1</sup>Department of Social Sciences and Humanities, University of Valle d'Aosta

# 22. SHAME ON HIM: THE IMPACT OF **OTHERS' APPRAISALS ON THE** PERCEPTION OF SOCIAL EMOTIONS

Christian Mumenthaler<sup>1</sup>, Tobias Brosch<sup>1</sup>, David Sander<sup>1</sup> & Antony Manstead<sup>2</sup> <sup>1</sup>University of Geneva, <sup>2</sup>School of Psychology, Cardiff University

# **23. EFFECT OF SUBLIMINAL AFFECTIVE** PRIMING ON FACIAL REACTIONS: ANOTHER EVIDENCE FOR APPRAISAL THEORY

Léonor Philip<sup>1</sup>, Jean-Claude Martin<sup>1</sup> & Céline Clavel<sup>1</sup> <sup>1</sup>LIMSI-CNRS

# 24. MUSICAL INFLUENCE ON THE VERBAL RECALL OF EMOTIONAL AUTOBIOGRAPHICAL MEMORIES

Marie Poncin<sup>1</sup>, Anne Weisgerber<sup>1</sup>, Séverine Balon<sup>1</sup>, Bernard Rimé<sup>1</sup> & Nicolas Vermeulen<sup>1</sup> <sup>1</sup>Université Catholique de Louvain

# 25. SWEET REWARD INCREASES PHYSIOLOGICAL DISCRIMINATION OF SIMILAR ODORS

Eva Pool<sup>1</sup>, Slyvain Delplanque<sup>1</sup>, Tatiana Jenkins<sup>1</sup> & David Sander<sup>1</sup> <sup>1</sup>Swiss Center for Affective Science; University of Geneva

# 26. IS WHAT I'M FEELING GENUINE? FICTION VERSUS REALITY

Vanessa Sennwald<sup>1</sup>, Florian Cova<sup>1</sup>, Amanda Garcia<sup>1</sup>, Julien Deonna<sup>1</sup> & DavidSander<sup>1</sup> <sup>1</sup>Swiss Center for Affective Sciences, University of Geneva

# 27. CHANGE AND STATUS QUO IN DECISIONS WITH DEFAULTS: THE EFFECT OF INCIDENTAL EMOTIONS DEPENDS ON THE TYPE OF DEFAULT

Yury Shevchenko<sup>1</sup> <sup>1</sup>University of Mannheim

# 28. PRECOCIOUS EMOTIONAL TROUBLE IN ALZHEIMER'S DIDEASE

Molka Snoussi<sup>1</sup> & Heidi Charvin<sup>1</sup> <sup>1</sup>Normandie University

# 29. EMOTIONAL MEANING IN CONTEXT IN RELATION TO SCHIZOTYPICAL TRAITS: AN ERP STUDY

Sarah Terrien<sup>1</sup>, Galina Iakimova<sup>2</sup>, Pascale Pomietto-Mazzola<sup>3</sup>, Véronique Baltazart & Arthur Kaladjian <sup>1</sup>Université de Reims Champagne-Ardenne, <sup>2</sup>Université de Nice Sophia Antipolis, <sup>3</sup>Institut des Neurosciences de la Timone

# 30. HOW SELF-RELEVANT APPRAISALS AND SELF-CRITICAL FEELINGS ELICIT EITHER SELF-DEFENSIVE OR SELF-IMPROVE MOTIVATIONS WHEN COMMUNICATING UNPLEASANT INFORMATION

Stine Torp Løkkeberg<sup>1,2</sup>, Nicolay Gausel<sup>2</sup> & Roger Giner-Sorolla<sup>1</sup> <sup>1</sup>University of Kent, <sup>2</sup>Østfold University College

# 31. EMOTION-SPECIFIC LOAD DISRUPTS CONCOMITANT AFFECTIVE PROCESSING

Nicolas Vermeulen<sup>1</sup>, Paula Niedenthal<sup>2</sup>, Gordy Pleyers<sup>1</sup>, Marie Bayot<sup>1</sup> & Olivier Corneille<sup>1</sup> <sup>1</sup>Université catholique de Louvain (UCL), <sup>2</sup>University of Wisconsin

# 32. THE INFLUENCE OF MUSIC ON THE PROCESSING OF EMOTIONAL FACES

Anne Weisgerber<sup>1</sup>, Tina Gilson<sup>1</sup> & Nicolas Vermeulen<sup>1</sup> <sup>1</sup>Université Catholique de Louvain

# 33. EFFECT OF PARTICIPATION IN A COLLECTIVE ACTION ON IDENTITY FUSION, SOCIAL INTEGRATION, AND SOCIAL BELIEFS.

Anna Wlodarczyk<sup>1</sup>, Larraitz Zumeta, Nekane Basabe & Darío Páez <sup>1</sup>University of the Basque Country, Social Psychology and Metholodology of Behavior Sciences, Psychology Faculty

### **POSTER SESSION II**

18:00-19:00

UNTER DEN LINDEN 6 Senatsaal

#### **Poster Session Schedule**

15:00-15:30	Posters Assembled
15:30-18:00	Posters Available for Viewing
18:00-19:00	Authors Present for Discussion
	and Questions
19:00-19:30	Dismantle Posters

## **1. EMOTION DIFFERENTIATION AND CLARITY OF FEELINGS: TWO DISTINCT** CONSTRUCTS

Charlotte Arndt<sup>1</sup> & Tanja Lischetzke<sup>1</sup> <sup>1</sup>University of Koblenz-Landau

# 2. ENHANCED ERN-CRN COMPONENTS **DURING PROBABILISTIC LEARNING** FOLLOWING THE INDUCTION OF **POSITIVE MOOD**

Jasmina Bakic<sup>1</sup>, Gilles Pourtois<sup>1</sup> & Rudi De Raedt<sup>1</sup> <sup>1</sup>Ghent University

## 3. EMBODIMENT AND EMOTIONAL MEMORY IN A SECOND LANGUAGE - AN EMG STUDY

Jenny Charlotte Baumeister<sup>1</sup>, Piotr Winkielman<sup>2</sup>, Markus Conrad<sup>3</sup>, Raffaella Rumiati<sup>1</sup> & Francesco Foroni<sup>1</sup> <sup>1</sup>SISSA, <sup>2</sup>UCSD, <sup>3</sup>Freie Universität Berlin

# 4. FIGHT OR FLIGHT: THE ROLE OF CONTROLLABILITY AND VALENCE

Evelien Bossuyt<sup>1</sup>, Agnes Moors<sup>1</sup> & Peter Kuppens<sup>2</sup> <sup>1</sup>Ghent University, <sup>2</sup>University of Leuven

# 5. RELEVANCE OF POSITIVE STIMULI **BENEFITS WORKING MEMORY** PERFORMANCE OF ADOLESCENTS MORE **THAN ADULTS**

Sofie Cromheeke<sup>1</sup> & Sven Mueller <sup>1</sup>UGent

# 6. NARCISSISM AND EMOTIONAL **CONTAGION: DO GRANDIOSE AND VULNERABLE FORMS OF NARCISSISM DIFFER IN SUSCEPTIBILITY TO** "CATCHING" THE EMOTIONS OF OTHERS

Anna Czarna<sup>1</sup> <sup>1</sup>Jagiellonian University

# 7. THE INFLUENCE OF FRUSTRATION ON ABSTRACT DEONTOLOGICAL MORAL CHOICE AS A FUNCTION OFEMOTIONAL **REGULATION SKILLS**

Csilla Deak<sup>1</sup> & Vassilis Saroglou<sup>1</sup> <sup>1</sup>University of Louvain

# 8. TWELVE MONTH OLDS USE OTHER'S **INTEREST TO APPRAISE THEIR ENVIRONMENT**

Daniel Dukes<sup>1</sup>, Nadège Foudon<sup>1</sup> & Fabrice Clément<sup>1</sup> <sup>1</sup>University of Neuchâtel

# 9. ATTENTION TO EMOTION EXPRESSIONS IN THE WIDER SPECTRUM OF AUTISM **TRAITS**

Pip Griffiths<sup>1</sup>, Jo Black<sup>1</sup> & Chris Ashwin<sup>1</sup> <sup>1</sup>University of Bath

# **10. AMPLIFICATION OF ATTENTIONAL BLINK BY DISTRESS-RELATED FACIAL EXPRESSIONS: RELATIONSHIPS WITH ALEXITHYMIA AND AFFECTIVITY**

Delphine Grynberg<sup>1</sup>, Nicolas Vermeulen<sup>1</sup> & Olivier Luminet<sup>1</sup> <sup>1</sup>Catholic University of Louvain

# 11. THE NOISE IN THE ROOM IS MAKING ME **ANGRY! - DISPLAY RULES IN LECTURER-**STUDENT INTERACTION IN GERMANY AND RUSSIA

Miriam Hansen<sup>1</sup> & Julia Mendzheritskaya<sup>1</sup> <sup>1</sup>Goethe-University Frankfurt

# **12. AGE-RELATED EFFECT ON EXPRESSIVE** ENHANCEMENT AND SUPPRESSION OF THE EMOTION ELICITED BY HUMOROUS **STIMULI**

Jonathan Harm<sup>1</sup> & Sandrine Vieillard<sup>1</sup> <sup>1</sup>Université de Franche-Comté

### **13. STILL A FRIEND? HOW FEELINGS OF GUILT EVOKE RE-EVALUATIONS OF** SOCIAL RELATIONS

Nicole Harth<sup>1</sup> <sup>1</sup>Friedrich Schiller University Jena

## **14. EMOTIONAL ACCULTURATION IN MINORITY YOUTH**

Alba Jasini<sup>1</sup>, Jozefien De Leersnyder<sup>1</sup> & Batja Mesquita<sup>1</sup> <sup>1</sup>University of Leuven

## **15. THE INFLUENCE OF META-MOOD ON** MOOD CONGRUENCY

Fatih Cemil Kavcioglu<sup>1</sup> <sup>1</sup>University of Mannheim

# **16. THE INFLUENCE OF LATERAL IMPLICIT** VISUAL AFFECTIVE STIMULI ON THE **EVALUATION OF NEUTRAL TARGETS**

Dorota Kobylińska<sup>1</sup> & Magdalena Śmieja-Necka<sup>2</sup> <sup>1</sup>University of Warsaw, <sup>2</sup>Jagiellonian University

# **17. EMOTIONAL EXPRESSION AND THE PERCEPTION OF COMPETENCE: THE** IMPACT OF GENDER AND ETHNIC GROUP **MEMBERSHIP**

Silvia Krauth-Gruber<sup>1</sup> <sup>1</sup>University Paris Descartes

# **18. DIFFERENCES IN NEGATIVE EMOTION DIFFERENTIATION WITHIN AND BETWEEN INDIVIDUALS: AN APPLICATION OF MULTILEVEL LATENT CLASS ANALYSIS**

Tanja Lischetzke<sup>1</sup> <sup>1</sup>University of Koblenz-Landau

# **19. EXTREME LIFE-CHANGING EVENTS, IMPACT ON BASIC BELIEFS AND POST-**STRESS GROWTH: WHY POSITIVE EVENTS REINFORCE EUDAIMONIC WELLBEING MORE STRONGLY THAN NEGATIVE EVENTS UNDERMINE IT

Gonzalo Martínez-Zelava<sup>1</sup>, Silvia da Costa<sup>1</sup>, Darío Páez<sup>1</sup> & María de los Ángeles Bilbao<sup>2</sup> <sup>1</sup>University of Basque Country, <sup>2</sup>Pontificia Universidad Católica de Valparaíso

# **20. APPRAISALS INTERACT TO** DIFFERENTIATE MULTI-COMPONENTIAL **EMOTION RESPONSES**

Ben Meuleman<sup>1</sup>, Agnes Moors<sup>2</sup>, Klaus Scherer<sup>1</sup> & Johnny Fontaine<sup>2</sup> <sup>1</sup>University of Geneva, <sup>2</sup>Ghent University

# **21. UNCONSCIOUS EMOTION REGULATION IN YOUNG AND OLDER ADULTS:** PHYSIOLOGICAL AND BEHAVIORAL **MEASURES**

Alejandra Rodríguez<sup>1</sup> & Sandrine Vieillard<sup>1</sup> <sup>1</sup>Université de Franche-Comté

# 22. EMOTION WORDS IN COMMUNICATIVE SITUATIONS: AN ERP STUDY

Lana Rohr<sup>1</sup> & Rasha Abdel Rahman<sup>1</sup> <sup>1</sup>Institut für Psychologie, Humboldt-Universität zu Berlin

# 23. IS EMOTION SUPPRESSION HARMFUL? IT **DEPENDS ON SELF-REGULATORY STRENGTH**

Michela Schröder-Abé<sup>1</sup> & Fay Geisler<sup>2</sup> <sup>1</sup>Technische Universität Darmstadt, <sup>2</sup>Ernst-Moritz-Arndt-Universität Greifswald

# 24. HOSTILE ATTRIBUTION "BIAS"? AGGRESSIVE INDIVIDUALS DISPLAY **BETTER PERFORMANCE IN THE IDENTIFICATION OF AGGRESSIVE INFORMATION**

Sarah Teige-Mocigemba<sup>1</sup>, Fabian Hölzenbein<sup>1</sup> & Karl Christoph Klauer<sup>1</sup> <sup>1</sup>Universität Freiburg

# **25. INTERPRETIVE BIAS OF NEUTRAL** AUDITORY STIMULI AND INTENSITY JUDGMENTS OF EMOTIONAL AUDITORY STIMULI: PERSONALITY EFFECTS

Tanja Traeger<sup>1</sup>, Tanja Lischetzke<sup>1</sup>, Michal Cugialy<sup>2</sup>, Michael Niedeggen<sup>2</sup> & Michael Eid<sup>2</sup>

<sup>1</sup>University of Koblenz-Landau, <sup>2</sup>Freie Universität Berlin

# **26. THE INTERPLAY BETWEEN THE** ANTICIPATION AND SUBSEQUENT **ONLINE PROCESSING OF EMOTIONAL INFORMATION AS MEASURED BY** PUPILLARY DILATATION: THE ROLE OF **COGNITIVE REAPPRAISAL**

Marie-Anne Vanderhasselt<sup>1</sup>, Jonathan Remue<sup>1</sup>, Kwun Kei Ng<sup>2</sup> & Rudi De Raedt<sup>1</sup> <sup>1</sup>Ghent University, <sup>2</sup>National University of Signapore

# 27. NEUROPHYSIOLOGICAL EVIDENCE FOR THE BENEFICIAL EFFECT OF A BROADER ATTENTION FOCUS WITH POSITIVE MOOD AT THE RESPONSE LEVEL

Naomi Vanlessen<sup>1</sup>, Valentina Rossi<sup>1</sup>, Rudi De Raedt<sup>1</sup> & Gilles Pourtois<sup>1</sup> <sup>1</sup>Ghent University

# 28. ALTERED PROCESSING OF DISTRACTING EMOTIONS IN ADOLESCENTS WITH ADHD

Nora Vetter<sup>1</sup>, Judith Buse<sup>2</sup>, Veit Roessner<sup>2</sup> & Michael N. Smolka <sup>1</sup>Technische Universität Dresden, <sup>2</sup>Department of Child and Adolescent Psychiatry and Psychotherapy, Dresden

# **29. A NETWORK APPROACH TO EMOTION DYNAMICS: THE RELATION BETWEEN** NEUROTICISM AND EMOTION NETWORK **CHARACTERISTICS**

Nathalie Vissers<sup>1</sup>, Laura Bringmann<sup>1</sup>, Wolfgang Vanpaemel<sup>1</sup>, Peter Kuppens<sup>1</sup> & Francis Tuerlinckx<sup>1</sup> <sup>1</sup>KU Leuven

# **30. ATTENTION PROBLEMS AND EMOTION** UNDERSTANDING IN CHILDREN

Maria von Salisch<sup>1</sup> <sup>1</sup>Leuphana University Lueneburg

# **31. DEPRESSION IN EARLY ADOLESCENCE:** THE RELATIONSHIP BETWEEN EMOTION AND COGNITIVE INHIBITION

Laura Wante<sup>1</sup>, Caroline Braet<sup>1</sup> & Sven Mueller<sup>1</sup> <sup>1</sup>*Ghent University* 

# **32. COLLECTIVE EMOTIONAL GATHERINGS.** SHARED EMOTIONAL STATES AND COMMITMENT TO A GROUP AND WELL-BEING

Anna Wlodarczyk<sup>1</sup>, Larraitz Zumeta<sup>1</sup>, Nekane Basabe<sup>1</sup> & Darío Páez<sup>1</sup> <sup>1</sup>University of the *Basque Country* 

# **33. AM I MORE SUSCEPTIBLE TO CATCHING** YOUR MOOD IF YOU ARE SIMILAR TO **ME? THE ROLE OF SIMILARITY IN AFFECTIVE CONTAGION**

Monika Wróbel<sup>1</sup> & Klara Królewiak<sup>2</sup> <sup>1</sup>University of Lodz, <sup>2</sup>University of Social Sciences and Humanities, Warsaw

## POSTER SESSION III

Friday, March 28

12:30-14:00

**UNTER DEN LINDEN 6** Senatsaal

#### **Poster Session Schedule**

08:00-08:30	Posters Assembled
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	and Questions
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# **1. ORAL VS. WRITTEN EMOTIONAL DISCLOSURE: DIFFERENCES IN AFFECTIVE** AND COGNITIVE CONTENT

Severine Balon<sup>1</sup> & Bernard Rimé<sup>1</sup> <sup>1</sup>University of Louvain

# 2. WHEN THE MASK 'FALLS': THE ROLE OF FACIAL MUSCLE RESONANCE IN MEMORY FOR EMOTIONAL LANGUAGE

Jenny Charlotte Baumeister<sup>1</sup>, Raffaella Rumiati<sup>1</sup> & Francesco Foroni<sup>1</sup> <sup>1</sup>SISSA

# **3. DOES AFFECT REACTIVITY TO UPLIFTS CO-OCCUR WITH AFFECT REACTIVITY** TO HASSLES? TESTING THE DIFFERENTIAL SUSCEPTIBILITY HYPOTHESIS AND ASSOCIATIONS WITH NEUROTICISM FACETS IN DAILY LIFE

Elise C. Bennik<sup>1</sup>, Jojanneke A. Bastiaansen<sup>1</sup>, Johan Ormel<sup>1</sup> & Albertine J. Oldehinkel<sup>1</sup> <sup>1</sup>University of Groningen, UMCG

# 4. DOES EMOTION DRIVE ATTENTION? **EVIDENCE FROM INHIBITION OF RETURN**

Elisa Berdica<sup>1</sup>, Antje Gerdes<sup>1</sup>, Andre Pittig<sup>1</sup> & Georg Alpers<sup>1</sup> <sup>1</sup>University of Mannheim

# 5. EMOTIONAL CORRELATES OF POLITICAL **IDEOLOGY: DIFFERENCES IN DISGUST** SENSITIVITY

Luciana Carraro<sup>1</sup>, Luigi Castelli<sup>1</sup> & Paolo Negri<sup>1</sup> <sup>1</sup>University of Padova

# 6. APPROACHING AVOIDANCE: A **DISTINCTION BETWEEN DISGUST- AND** FEAR-RELATED COGNITIVE **MECHANISMS.**

Ana Chainho<sup>1</sup> & Hannie Van Hooff<sup>1</sup> <sup>1</sup>VU University of Amsterdam

# 7. MOTIVATED EMPATHY: THE MECHANICS OF THE EMPATHIC GAZE

David Cowan<sup>1</sup>, Eric Vanman<sup>1</sup> & Mark Nielsen<sup>1</sup> <sup>1</sup>The University of Oueensland

# 8. AFFECTIVE CONSEQUENCES OF SELF-FOCUS IN VULNERABLE AND GRANDIOSE NARCISSISTS

Anna Czarna<sup>1</sup>, Monika Wróbel<sup>2</sup> & Virgil Zeigler-Hill<sup>3</sup> <sup>1</sup>Jagiellonian University, <sup>2</sup>University of Lodz, <sup>3</sup>Oakland University

## 9. HUMAN-COMPUTER INTERFACES: **OPTIONS AND LIMITS TO EXERCISE CONTROL VIA VOLUNTARY CONTROLLED PUPILLARY CHANGES**

Jan Ehlers<sup>1</sup>, Nikola Bubalo<sup>1</sup> & Anke Huckauf<sup>1</sup> <sup>1</sup>Institut für Psychologie und Pädagogik, Ulm

# **10. CAN DIFFERENT TYPES OF VALENCE BE DISSOCIATED IN THE EMOTION COMPONENTS? A REVIEW OF EMPIRICAL STUDIES**

Kornelia Gentsch<sup>1</sup>, Ursula Beermann<sup>1</sup>, Lingdan Wu<sup>1</sup> & Klaus Scherer<sup>1</sup> <sup>1</sup>Swiss Center for Affective Sciences (CISA)

# **11. ATTENTION TO FACIAL EMOTION EXPRESSIONS IN AUTISM**

Pip Griffiths<sup>1</sup>, Laurie Batchelder<sup>1</sup> & Chris Ashwin<sup>1</sup> <sup>1</sup>University of Bath

# **12. FUNCTIONAL AND DYSFUNCTIONAL RUMINATION IN ALCOHOL DEPENDENCE**

Delphine Grynberg<sup>1</sup>, Yasmine Briane<sup>1</sup>, Philippe de Timary<sup>1</sup> & Pierre Maurage<sup>1</sup> <sup>1</sup>Catholic University of Louvain

# **13. UNDERSTANDING OF BODY SENSATIONS** AND ACTION TENDENCIES ACCOMPANYING BASIC AND SELF-CONSCIOUS EMOTIONS IN CHILDREN AND ADULTS

Bettina Janke<sup>1</sup> <sup>1</sup>University of Education

## **14. HUMILIATION AS AN INTENSE EMOTIONAL EXPERIENCE: EVIDENCE** FROM THE ELECTRO-ENCEPHALOGRAM

Kai Jonas<sup>1</sup> & Marte Otten<sup>1</sup> <sup>1</sup>University of Amsterdam

### **15. EMOTIONS AND ACTIONS IN RESPONSE TO UNFAIR BEHAVIOR**

Olga Klimecki<sup>1</sup>, Patrik Vuilleumier<sup>1</sup> & David Sander<sup>1</sup> <sup>1</sup>Swiss Center for Affective Sciences, University of Geneva

# **16. EMOTIONAL INTELLIGENCE AND THE EFFECTIVENESS OF ANGER REGULATION STRATEGIES**

Dorota Kobylińska<sup>1</sup> & Dorota Karwowska <sup>1</sup>University of Warsaw

# **17. PERCEIVED TO FEEL LESS: INTENSITY** DIFFERENCES IN INTERCULTURAL **EMOTION PERCEPTION**

Pumin Kommattam<sup>1</sup>, Kai Jonas<sup>1</sup> & Agneta Fischer<sup>1</sup> <sup>1</sup>University of Amsterdam

# **18. FACING THE CHAMELEON: UNMASKING** THE ROLE OF FACIAL EXPRESSIONS IN **INTERPERSONAL MIMICRY**

Wojciech Kulesza<sup>1,2</sup>, Robin Vallacher<sup>2</sup>, Aleksandra Cislak<sup>1</sup>, Sylwia Bedynska<sup>1</sup> & Andrzej Nowak<sup>1</sup>

<sup>1</sup>Department of Psychology, University of Social Sciences and Humanities, Warsaw Faculty; <sup>2</sup>*Florida Atlantic University* 

# **19. DO EMOTIONS INFLUENCE WHAT WE CARE ABOUT? THE EFFECT OF MORAL** AND NON-MORAL GUILT AND PRIDE ON VALUES

Helen Landmann<sup>1</sup> <sup>1</sup>Humboldt-Universität zu Berlin

# 20. DOES HOSTILE SEXISM INCREASE OR **DECREASE SOCIAL COMPETITION? IT DEPENDS ON EMOTION: THE ROLE OF** ANGER-RELATED AND EFFICACY-**RELATED EMOTIONS**

Elena Lemonaki<sup>1</sup>, Greg Maio<sup>1</sup> & Tony Manstead<sup>1</sup> <sup>1</sup>*Cardiff University* 

# 21. THE INFLUENCE OF COMMON GROUP **IDENTITY ON FEELINGS OF GUILT AND IMPLICIT ATTITUDES**

Norbert Maliszewski<sup>1</sup> & Anna Werner-Maliszewska<sup>2</sup> <sup>1</sup>University of Warsaw, <sup>2</sup>Warsaw School of Social Psychology

# 22. EMOTIONS, HAPPINESS AND HEDONIC ADAPTATION

Rafael Martos-Montes<sup>1</sup>, Ana Raquel Ortega-Martínez<sup>1</sup>, Encarnación Ramírez-Fernández<sup>1</sup>, M. Rosario García-Viedma<sup>1</sup> & José M. Colmenero-Jiménez<sup>1</sup> <sup>1</sup>Universidad de Jaén

#### 23. ATTENTIVE TRACKING OF EMOTIONAL FACES

Miriam Müller-Bardorff<sup>1</sup>, Christof Kuhbandner<sup>2</sup> & Georg Jahn<sup>1</sup> <sup>1</sup>University of Greifswald, <sup>2</sup>University of Munich

# 24. SELF-CRITICISM-

#### ISITDELIVEREDORRECEIVED?EXAMININ GSELF-PERCEPTIONINSELF-CRITICALEMOTIONS

John Sabo<sup>1</sup> & Roger Giner-Sorolla<sup>1</sup> <sup>1</sup>University of Kent

# 25. WHO SAID THAT? - PUTATIVE SENDER CHARACTERISTICS CHANGE THE PROCESSING OF SOCIAL FEEDBACK

Sebastian Schindler<sup>1</sup>, Inga Steppacher<sup>1</sup>, Martin Wegrzyn<sup>1</sup> & Johanna Kissler<sup>1</sup> <sup>1</sup>University of Bielefeld

# 26. ELECTROPHYSIOLOGICAL SIGNATURES OF SOCIAL PRIMING OF AFFECTIVE JUDGMENT

Robert Schnuerch<sup>1</sup> & Henning Gibbons<sup>1</sup> <sup>1</sup>University of Bonn

# 27. SAME SITUATION DIFFERENT EMOTIONS? DIFFERENTIAL FEELING SELF-REPORT IN THE CONTEXT OF SELF-CONSCIOUS AWARENESS IS ASSOCIATED WITH DIFFERENT EMOTIONAL EXPRESSIONS

Sophie von Garnier<sup>1</sup>, Sylvia D. Kreibig<sup>1</sup> & James J. Gross<sup>1</sup> <sup>1</sup>Stanford University

# 28. VALANCE-SPECIFIC ATTENTION ALLOCATION INCREASES PROCESSING OF EMOTIONAL WORDS IN LANGUAGE-RELATED BRAIN AREAS

Martin Wegrzyn<sup>1</sup>, Cornelia Herbert<sup>2</sup>, Thomas Ethofer<sup>3</sup>, Tobias Flaisch<sup>4</sup> & Johanna Kissler<sup>1</sup> <sup>1</sup>University of Bielefeld, <sup>2</sup>University of Würzburg, <sup>3</sup>University of Tübingen, <sup>4</sup>University of Konstanz
# ABSTRACTS\*

\* All sessions in chronological order, posters and papers within respective sessions in alphabetical order

#### 27.03.2014, 09:00-10:30

Keynote I

### **EMOTIONAL CONTROL OF PERCEPTION AND BRAIN STATES**

#### Vuilleumier. P.

Emotions do not only serve to assign a particular value to objects or events forming the content of consciousness, but can directly influence perception and thus shape the content of consciousness and action. The talk will present an overview of functional neuroimaging studies in humans that contributed to show how sensory and motor processes can be modulated by the affective significance of stimuli. Furthermore, emotional events can also influence brain activity in a more sustained manner, with long-lasting changes in brain state and functional connectivity following transient emotions, and these effects may in turn influence the subsequent processing of other stimuli. These findings also have implications to better understand and assess neural mechanisms that may be implicated in psychiatry disorders.

27.03.2014. 11:00-13:00

#### Paper Session 1.1 Emotion Theory

### **DESIRES, COGNITIVE EVALUATIONS AND EMOTIONS**

#### Adamos. M.

Although most scholars of emotions agree that emotions involve cognitive evaluative states such as beliefs and judgments, as well as bodily feelings and their behavioral expressions, only a few pay close enough attention to the desiderative states (i.e. desires and wishes) and their relation to emotions. In this essay I shall argue that emotions and desires are conceptually connected, because the cognitive evaluations, which are required for emotions, are also logically related to desires. Indeed, it is difficult to imagine someone to be afraid and not have the desire to avoid the danger, be in love and not have the desire to be with the beloved, or be angry and not have the desire to retaliate in some way. I shall attempt to show through these and other cases of emotions that the conceptual relation between emotions and desires is that of logical presupposition, in the sense that an emotion conceptually presupposes some type of desiderative state. However, the reverse is not the case, as it is certainly possible for one to have a desire specific to an emotion, without having the emotion. For instance, although the desire for revenge presupposes that one believes that one has been wronged, it does not necessarily show that one is angry. This is so, because a cognitive evaluative state does not necessarily entail an emotion, and by logical implication, a desiderative state does not necessitate an emotion either.

## ARE VALENCE AND AROUSAL SEPARABLE IN EMOTIONAL EXPERIENCE?

Kron, A., Goldstein, A., Lee, H. & Pilkiw, M., Anderson, A.K.

The most prominent dimensional model of conscious experience of emotion is bipolar valence and arousal. In the three largest emotional stimuli pools (IAPS, Lang, Bradley & Cuthbert, 1997; IADS, Bradley & Lang, 2007; ANEW: Bradley & Lang, 1999), stimuli were standardized according to self report ratings of arousal and valence. Consequently, hundreds of experiments in many disciplines were designed and interpreted in terms of arousal and valence. In this work we examine the validity of the bipolar valence arousal model in the context of feelings elicited by visual stimuli. In line of three experiments we have tested whether arousal and valence are different feeling qualia. If they are not separate qualia, it will be difficult to justify designing experiments and interpreting data in these terms. In experiments 1 and 2, using self report Electro Dermal Activity and facial EMG we examined whether the dissociation between valence and arousal reflects introspection about distinct emotional qualia or the way in which valence is measured. When valence was measured using a bipolar scale (ranging from negative to positive), it was largely dissociable from arousal. By contrast, when two separate unipolar scales of pleasant and unpleasant valence were used, their sum was equivalent to feelings of arousal and its autonomic correlates. In experiment 3 we examine whether arousal has a unique contribution over dual unipolar scales in explaining physiological arousal (EDA) and self reported feelings. We tested and analyzed the possible contribution of arousal at two levels of analysis: at the item-level and individual-level. Results suggest that selfreports of arousal have neither an advantage over valence in predicting EDA nor a unique contribution. We discuss the relevance of results for experimental design and the bases for the conscious experience of emotions.

## **EMOTIONS, EVALUATIONS AND DESIRES**

### Lauria, F.

Emotions are intimately linked to desires. But how are we to characterise this relation? According to influential accounts of emotions in psychology and philosophy, to feel an emotion is to evaluate the world in a positive (or negative) light (see for instance Scherer 2005, Deonna & Teroni 2012). Now, on a standard view of desire, desiring is evaluating as well (e.g. Oddie 2009, Friedrich 2012). This suggests that emotions and desires belong to the same type of mental states, namely evaluations. But is that really so?

In this talk, I shall approach this issue by using the common philosophical method of conceptual analysis. The upshot is that, contrary to the view of desire mentioned, desires are not evaluations. This result then suggests that desires are distinct from emotions and are grounded on emotions.

I shall defend this picture in four steps. In the first part, I present in more detail the evaluative view of desire. In the second part, I argue for the existence of two distinctions between desires and evaluations. The first concerns the so-called direction of fit of representations. In a nutshell, I claim that the world should conform to our desires, for desires to be satisfied, while this is not so for evaluations. The second distinction concerns the explanatory relations holding between desires and evaluations. I argue that desires can be explained by evaluations, in which case the two are distinct. From these observations, in the third part, I motivate the thought that desires are distinct from emotions and that, if anything, desires depend on emotions. The last part sketches an account of desire that is in line with our results, namely the view that desires bear an essential relation to norms. On this deontic view, desiring a state is representing it as what should be.

# FALSE MENTAL FEEDBACK AS A METHOD TO STUDY THE NEURAL **REPRESENTATION OF FEAR, DISGUST AND MORBID FASCINATION.**

### Oosterwijk, S., Lindquist, K. & Barrett, L.

Negative stimuli do not only evoke typical avoidance states such as fear or disgust, but may also induce a state of "morbid fascination" or an urge to approach and explore the stimulus. We argue that this variability in experience occurs because affective states can be conceptualized differently depending on the knowledge that is present when people process a stimulus (Barrett, 2006). In the present neuroimaging study, we apply a novel and innovative method to investigate the neural systems involved in different conceptualizations of negative stimuli. Participants viewed IAPS images in the scanner in two phases. In phase 1, participants passively viewed images while we pretended to monitor neural activity in real-time. In phase 2, participants received (false) feedback about the 'mental state' experienced in phase 1; each image was randomly combined with fear, disgust, fascination or "could not be calculated" (control) feedback. Our results demonstrated that this manipulation was successful; participants judged the false feedback correct for 70% of the trials on average. Consistent with work on affective labeling (Lieberman et al., 2007), the neuroimaging results revealed that the ventrolateral prefrontal cortex engaged significantly stronger after fear, disgust and fascination feedback compared to control feedback. The dorsomedial prefrontal cortex, an important node in the network for conceptualization (Lindquist et al., 2012) and a region consistently engaged by reappraisal (Wager et al., 2008), engaged significantly stronger after fascination feedback than all other feedback conditions. This finding supports the assumption that the conceptualization network engages relatively stronger when people conceptualize an affective stimulus in an atypical manner. Together, these findings provide important insights into the neural systems that support the construction of discrete emotional experiences. Furthermore, the present study is the first to examine the neural representation of the common, but so far experimentally unexplored state of morbid fascination.

## ON THE AUTOMATIC LINK BETWEEN AFFECT AND TENDENCIES TO APPROACH AND **AVOID: CHEN AND BARGH (1999) REVISITED.**

#### Rotteveel, M.

Within the literature on emotion and approach-avoidance behavior the work by Chen and Bargh (1999) takes up a prominent place (cited 725 times, October 10th , 2013). In Experiment 1 participants evaluated attitude objects affectively by pulling or pushing a lever. Participants who had to pull the lever for positively valenced attitude objects and push the lever for negatively valenced attitude objects did so faster than those participants who had to pull for negatively valenced attitude objects and push for positively valenced attitude objects. In their second experiment Chen and Bargh eliminated the explicit evaluative instructions and participants just responded to the mere presentation of the attitude objects. Similar results were obtained as in Experiment 1. On basis of these results, Chen and Bargh concluded that (1) attitude objects are automatically evaluated; and (2) attitude objects automatically trigger a behaviorally tendency to approach or avoid. A meta-analysis (Phaf, Mohr, Rotteveel, & Wicherts, Submitted) of 29 studies using different experimental paradigms to study approach and avoidance behavior with 81 effect sizes (combined N = 1538) indicated, however, no clear evidence for an automatic link between affective information processing and approach and avoidance responses. We conducted therefore a preregistered replication attempt (https://openscienceframework.org/project/wXiGz/) using a very similar experimental setup, stimuli, and instructions as used by Chen and Bargh in their experiments (Rotteveel et al., Accepted for publication in Frontiers in Psychology). In this talk I will present the data of both experiments and discuss the nature of the link between affective information processing and approach and avoidance behavior.

# **REAL EMOTIONS - A STUDY OF SPONTANEOUS AND ENACTED EMOTIONAL VOCALISATIONS**

#### Sauter, D. & Fischer, A.

Studies of emotional expressions largely rely on posed expressions, as these allow researchers control over the intended feeling state, and also can be produced in environments where good quality recordings can be made. However, posed emotion portrayals may be exaggerated or conventionalized compared to spontaneously occurring expressions. It has been suggested that spontaneous expressions of emotion do not in fact reliably communicate emotions when presented in the absence of contextual information. In this study, we examine the recognition of spontaneous vocalisations, such as screams, laughs, sighs, and grunts. Our results show that, although accuracy rates are lower for spontaneous than for posed sounds, listeners are able to infer emotional states from spontaneous vocalisations at better-than-chance rates. Participants were also able to distinguish enacted sounds from spontaneous ones, supporting the notion that posed expressions differ from spontaneous ones on features to which perceivers are sensitive. These findings indicate that the use of posed vocalisations as stimuli likely inflates recognition rates, but also show that spontaneous expressions reliably communicate emotions.

#### 27.03.2014. 11:00-13:00

Symposium 1.1

## WHY HUMANS CRY: THE FUNCTIONS OF TEARS

#### Gračanin, A., Švegar, D., Vingerhoets, A., Cova, F. & Hesdorffer, D.

The production of emotional tears, a uniquely human property, is an understudied phenomenon. Whereas lay theories attribute several functions to crying, scientific evidence is still scarce. Consequently, many basic questions concerning the functions of crying, such as whether crying brings relief and if it induces succor cannot yet be definitively answered. Whereas the focus was initially on the intra-individual effects of crying, the attention more recently shifted to inter-personal effects, for example examining the question how the sight of tears impacts on the perception, attitudes and behaviors of others. Recent publications have also speculated on the role of tears in human evolution. The general idea is that tears might have been important for the development of our empathic skills and that crying, being an honest signal, may have facilitated the rather uniquely human mutual collaboration. The current state-of-science is particularly characterized by the lack of adequate theories and models that are helpful to design studies with testable hypotheses. In addition, the wide variety of methods and the fact that most research is limited to self-report are major limitations, preventing the field to make good progress. With the current symposium we hope to make a beginning of a more structured and theory driven approach of the study of human crying. In this symposium different possible functional aspects of crying and tears will be addressed, with a variety of research approaches. The research findings are all very challenging and call for more research. The variety of approaches also illustrate the high potential of crying as a research topic of both fundamental researchers, to learn more about human emotions and human nature, but also with possible relevance for clinical practice and other applied settings. In the first contribution, Dr. Gračanin will provide more insight into the question why crying sometimes seems to result in mood improvement, whereas in other studies no such beneficial effects are reported. Subsequently, Dr. Svegar will present findings suggesting that the mere sight of tears may even have an impact on the accuracy of perceptual processes, in particular in women. Third speaker is Dr. Vingerhoets, who will demonstrate how the perception of tears has a major impact on self-reported empathy, connectedness and willingness to provide succor. The final two contributions address a specific kind of tears. Dr. Cova's research reveals the role of tears when being moved. His in depth analysis shows which situations really move us to tears. Finally, Drs. Hesdorffer and Trimble present results of a study on tearful reactions to music and art within different age groups.

# WHY CRYING DOES AND SOMETIMES DOES NOT SEEM TO ALLEVIATE MOOD: A **QUASI-EXPERIMENTAL STUDY**

#### Gračanin, A.

The empirical record regarding the question whether or not crying brings relief and improves mood reveals highly discrepant findings. Whereas retrospective studies suggest that, at least in a substantial proportion of all crying episodes, crying seems beneficial and produces cathartic effects, results of quasi-experimental laboratory studies consistently demonstrate negative effects of crying on mood. The present study was specifically designed to evaluate a possible explanation for this paradox by assessing mood in a laboratory setting immediately after filminduced crying, and at follow up. Mood ratings of 21 criers and 21 non-criers, consistent in self-reported and observed (non)crying behavior, were compared before exposure to an emotional movie (T1), immediately after (T2), as well as 20 (T3) and 90 minutes (T4) later. In addition, the existence of a possible dose-response relationship between crying and mood improvement was explored with a regression analysis with crying frequency as predictor and mood changes as dependent variables. Results showed that immediately after the film (T2), criers reported a decrease in mood compared to the initial measurement (T1), which was absent in the non-criers. However, at T3, compared to T2, the mood improved in both groups, with significantly stronger effects in criers. Finally, while the mood improved only in non-criers at T3 compared to T1, T4 revealed the opposite, i.e., the mood increased only in criers, suggesting that mood improvements that follow crying may need some more time to develop. Correspondingly, the relation between crying frequency and mood improvements, although marginally significant, was found at T4. These results thus appear to reconcile the seemingly inconsistent findings from previous studies. Immediate effects after crying show a different pattern than more long-term effects. However, it is not certain whether the reported mood improvements really reflect experienced beneficial emotional consequences or rather represent a kind of artifact (e.g., a response shift phenomenon).

# THE EFFECTS OF FACIAL EXPRESSIONS AND TEARS ON THE SPEED OF SEX RECOGNITION

### Švegar, D.

The objective of the experiment was to investigate how facial expressions and tears affect the speed of sex recognition.

Photographs from Karolinska Directed Emotional Faces database (KDEF) were used as stimuli material and presented to 186 participants (95 male and 91 female), who were divided into three experimental groups. Each group was presented with 40 photographs of human emotional expressions. The pictures showed no clear signs of sex markers (beard, jewelry, make-up, hair, etc.). The first group viewed sad expressions, the second crying faces while the control group was exposed to neutral expressions. In order to keep idiosyncratic facial features constant, each stimuli set contained different expressions of the same models, so the only variable aspect of stimuli within each set was the emotional expression and tears. The participants' task was to recognize whether the faces were male or female.

ANOVA revealed that both main effects (sex of participants and expression of models) were significant, together with the interaction. Women took significantly less time to recognize models' sex than men. Regardless of their sex, participants needed significantly less time to recognize the sex of crying faces in comparison to neutral and sad faces. Post-hoc analysis showed that facial expressions of models affected only the reaction times of female participants. While men were responding equally slow in all conditions, women were extremely fast in the condition of crying faces, moderately fast when exposed to sad faces, but as slow as men in the control condition.

Since women are more sensitive to signs of other people suffering, observing sad and especially crying people might activate their evolutionally developed mechanism for feeling empathy, helping and providing support. Additional experiments are currently being conducted in order to examine the external validity of these findings and to investigate if tears elicit approaching behavior.

# **MUSIC AND VISIBLE TEARS IMPACT ON THE AFFILIATIVE REACTIONS TO EMOTIONAL FACES**

### Vingerhoets, A. & Van Der Velden, Y.

Previous research has suggested that music may influence the perception of visual stimuli and that visible tears have a major effect on the evaluation of facial expressions. This experiment was designed to investigate the effect of music of different valence and tears on the affiliative reactions to emotional faces.

Participants (96 female undergraduate university students, mean age 19 years) each rated 20 photos, 10 while listening to sad, quiet or happy classical piano music and 10 without music. Half of the rated photos depicted a man or a woman with visible tears, the other half showed the same pictures with the tears digitally removed. The following dimensions were assessed with regard to the depicted individual: feelings of (social) connectedness, level of empathy, tendency to provide support and perceived agreeableness. Within subject factors were "tears" (photos with tears vs. photos without tears) and "music" (with concurrent music vs. no music). Between subject factor was "music valence" (sad, calm/relaxing, and happy).

A mixed model Anova revealed that both main factors "Tears" and "Music" have a significant positive effect on all dimensions, although the effect sizes differ considerably. The presence of tears has, generally, strong effects (although less for the agreeableness ratings), whereas the exposure to music has only limited effects. Contrary to expectation, the valence of music had no differential effects.

These findings demonstrate that faces with visible tears, compared to the same faces without tears, enhance feelings of connectedness, increase the level of induced empathy, stimulate the tendency to provide support, and moderately enhance perceived agreeableness. Tears thus seem to promote social bonding.

### **BEING MOVED TO TEARS**

#### Cova. F.

We often say that we are 'moved' or that certain things are 'moving'. However, it is not clear what such expressions mean. In this talk, I will argue that, barring a few important exceptions, the phenomenon we refer to using the expression "being moved" is a distinct type of emotion. More precisely, I will argue that being moved is the experience of a positive core value perceived by the moved subject as standing out in the circumstances triggering the emotion, and that this experience is characterized by a warm feeling in the chest accompanied by what we may call 'tears of joy'. Finally, I will also argue that being moved draws us to focus on what is important to us, and that this cognitive effect may express itself in behavioral changes, such as an increase in prosocial behavior.

To support this claim, I will draw on three series of experiments. Drawing on a recall task, experiments 1 and 2 examine what kind of events or objects people are moved by, and compare 'being moved' to 'mirth' and 'joy'. Then, using emotional induction through the use of videos, experiments 3 and 4 examine the bodily feelings characteristic of 'being moved', comparing them to the bodily feelings inspired by joy and the putative emotion of 'elevation'. Finally, using once again emotional induction through videos, experiments 4 and 5 test for the behavioral effect of 'being moved', comparing its impact on prosocial behavior to the one of mirth and elevation.

## THE DEVELOPMENTAL TRAJECTORY OF CRYING IN RESPONSE TO THE ARTS

Hesdorffer, D., Trimble, M. & Kakkanatt, T.

Little is known about crying in response to the arts in children. An increase in emotional response with age was found for learned musical pieces (Nelson et al 1985). Older children, particularly girls, were more empathic to characters from a drama where actors selected emotional scenes (Klein, 1994).

In a survey of crying in response to the arts in children, 5-18 years, we hypothesized that: young children are more likely to cry to stories than other arts; across all ages and arts, girls are more likely to cry; and increasing exposure to an art is positively correlated with crying.

The study was conducted in a suburban school district. Columbia University gave ethics approval. The school district board emailed parents, explaining the study and providing the survey link. Parents helped children too young to read fluently. Crying in response to stories/novels, biography, paintings, music, statues/sculpture, and buildings/architecture was queried and the degree of exposure to each art assessed.

We report findings of 110 children. For each art type, the proportion of crying increased with age. In elementary and middle school stories triggered tears more than other arts, followed by biography and music. High school children were most likely to cry with music and stories. Within age groups and across most arts, girls were more likely to cry than boys. Exceptions were stories and paintings in elementary school children, and statues and buildings in high school children.

Our results are similar to the two studies examining music and drama, but extend to more arts. The increased tearfulness of younger children in response to stories will be discussed as well as the importance of stories and music for engendering empathy. The full survey will be completed by the meeting.

### 27.03.2014, 11:00-13:00

### Symposium 1.2

### **COLLECTIVE EMOTIONS AND EMOTIONS IN COLLECTIVE CONTEXT**

#### Rimé, B. & Kappas, A.

With the writings of Durkheim, Freud, Lebon, Tarde, collective emotions represented an important topic a century ago. Since then, that interest vanished to the point that the notion of collective emotion usually does not appear in the index of textbooks in social psychology or the psychology of emotions. However, recently, interest in collective emotions resurfaced. This trend may be due in part to concerns raised by current events, for instance the emotional mass movements occurring in different parts of the world or the spectacular crowd mobilizations raised by communication of emotions in social networks. Empirical research on collective emotions is experiencing a renaissance. This symposium aims to bring together contributions representing this current, with two different views and complementary perspectives: emotions in a collective context and collective emotions. The first two presentations will illustrate emotions in collective context. Using two synchronized cameras, the first study performed a micro-analysis of emotional facial reactions of passengers in situations of high density in the Parisian subway cars when new passengers were boarding. The study investigated the dynamics of transactions that develop between the two types of passengers when the physical contact between them is inevitable. Three major types of emotional transactions could be identified and documented. The second study examined the bodily emotional expression of musicians in the course of their musical performance. A high-level technical device has enabled to manipulate the attitudes and reactions of their audience. Forty avatars (a 3-D representation of an individual) manifested either an increasingly attentive attitude, or expressions of boredom. The differential effects of the collective manifestations of this audience upon on the expressive behavior of the performers were analyzed. The next two studies were focused on collective emotions. The third study examines emotions in interactions of thousands of Internet users. It is proposed that in this context, collective emotional states do not result from the mere aggregation of individual emotions to emotional information, but well from nonlinear response of users to such information. A modeling framework to analyze and stimulate collective emotions in online communities will be presented and illustrated in the case of live interactive Internet chatrooms. The fourth study was conducted on performers (dancers, musicians, singers, actors) of a musical and entertaining show. The purpose of the investigation was to test Durkheims' classic but untested model of individual (e.g., self-esteem) and social (e.g., social integration) effects of participation into collective emotional events. The model predicts that such effects are mediated by the experience of emotional synchrony among participants. Dependent variables were assessed one day before and three days after the public performances. The mediating variable was measured immediately after these performances. Its role, as predicted, was strongly confirmed for all but one of the dependent variables. After the four presentations, a discussion will be conducted on the promises and challenges of this field of investigation.

# FROM INDIVIDUAL TO INTERPERSONAL EMOTIONAL TRANSACTIONS: COPING WITH TERRITORIAL OFFENSES IN THE PARIS SUBWAY

### Aranguren, M.

On the basis of field observations in the Paris subway, the talk examines the conditions under which individual emotions become interpersonal in situations of copresence. The situations on focus are characterized by high density (number of passengers per square meter) and inevitable physical contact, which elicits emotions if passengers see it as a violation of interpersonal distance (or proxemic) standards. The emotions evoked by proxemic offenses were recorded using two synchronized cameras as passengers get on and off between the train and the platform.

Sequential analysis, based among others on objective coding of facial behavior, reveals two typical emotional transactions through which passengers resolve the emotions due to offensive physical contact : nonverbal repair (or appeasement) and discreet disapproval (or contempt). A third emotional transaction could be identified that appears to be less effective for emotion resolution, namely the hostile pattern of interaction that sociologist Erving Goffman called "character contest".

While discreet disapproval can unfold fully without engaging a second person, nonverbal repair and the character contest are essentially interpersonal emotional transactions. Finally, the contrasting dynamics of repair and character contest are compared, the one leading to appeasement, the other to escalation.

# EVALUATING THE IMPACT OF SOCIAL CONTEXTS ON EMOTIONAL EXPRESSION **DURING MUSIC PERFORMANCE.**

### Glowinski, D., Naëm, B., Ott, T., Shirole, K., Rappaz, M. & Grandjean, D.

Our study aims at investigating the effect of the social context on musician emotional expressivity (EE) during performance. The primary goal of our study was to test the effects of the communication of emotional expression (EE) between the performers and the observers (Juslin, 2013). Through the design of a multimodal setup including virtual immersive environments, we were able to modify the social contexts that are known to affect expressive behavior in music performance (Egermann et al, 2011). The musicians were first instructed to play with different levels of expressivity to elicit marked behavioral differences in the performance: usual (concert-like), metronomic and emphatic (over-expressive) (Dahl et al., 2007). Then, two different conditions related to the social attitudes of avatars (a 3-D representation of an individual) have been manipulated. In the first case, the avatars (n=40) had an attentive attitude (all avatars looking at the performer with interest progressively) or they exhibited an annoyed attitude (avatars looking around the room with a bored expression). Consistent with Juslin's framework, our expected results on EE are that (i) different patterns of movement will characterize each performance condition (e.g., the concert-like expressive style will be characterized by a higher fluidity of full-body expression); (ii) the social factors (attitude of avatars) bias these behavioral differences (e.g., attentive avatars gazing at the performer may augment the rigidity of his or her behavior (freezing effect, Vereijken et al., 1992). A generalized linear mixed model (GLMM) approach was chosen to test the values of the musicians<sup>1</sup> expressive behavior.

# UNDERSTANDING COLLECTIVE EMOTIONS IN ONLINE COMMUNITIES THROUGH **AGENT-BASED MODELING**

Garcia, D., Kappas, A., Kuester, D. & Schweitzer, F.

In online communities, collective emotional states can emerge from the interaction of thousands of Internet users. These collective emotions largely depend on the nonlinear response of users to emotional information and thus differ from the simple aggregation of individual emotions. We present our approach to online collective emotions, centered on the technique of agent-based modeling of emotional interaction. First, we present a modeling framework to analyze and simulate collective emotions in different types of online communities, including fora and social networks. Second, we statistically analyze large amounts of online emotional expression through text, finding the traces of collective emotions. Third, we empirically validate the time dynamics of emotions in our model through experimental studies, providing an integrated approach to the phenomenon of online collective emotions.

We illustrate the application of our method to the case of IRC chatrooms, where a large number of users interact in real time. Our statistical analysis shows the emergence of collective emotional persistence, as an emotional superstate shared by the users of the chatroom. Through an agent-based model, we explain this collective behavior through the time changes of valence and arousal of individual users, along with their emotional expression in the chat. We tested the assumptions of this model against experimental studies and word frequency analysis in largescale datasets of online expression in text.

# PSYCHOSOCIAL EFFECTS OF EMOTIONAL SYNCHRONY AND IDENTITY FUSION AMONG DANCERS, MUSICIANS, SINGERS AND ACTORS OF A MUSICAL AND **ENTERTAINING SHOW**

#### Rimé, B., Adurno, M., Páez, D. & Zumeta, L.

Durkheim's (1912) classic views on effects of emotional synchrony in collective events were never submitted to empirical test. In line with his views, we predicted that in a collective event, felt emotional synchrony correlates with perceived fusion of identity with the group. Next, we predicted that the experience of emotional synchrony enhances (1) positive perception of the social climate, (2) positive affect, (3) self-esteem, (4) social integration, and (5) socially shared beliefs. Forty-two performers in a musical and entertaining group show completed twice the same study forms assessing these five DV's. They did do first before and then one week after a set of four successive daily public performances. Immediately after their final show, performers also rated their identity fusion with the group and their felt emotional synchrony with the other performers. As predicted, the two variables had a high intercorrelation, r(42) = .69, p < .0001. We then compared participants with a high (N = 22) and low experience (N = 20) of emotional synchrony. The former evidenced higher scores for positive social climate  $(\eta p 2 = .094)$ , self-esteem  $(\eta p 2 = .113)$ , social integration  $(\eta p 2 = .272)$ , but not social beliefs. For positive affect, the effect was marginal. We presume that social beliefs were not influenced because this musical and entertaining show was devoid of symbolically loaded messages Personnel who assisted the performers all along the preparation of the show and then attended the show (N = 22) completed the same forms at the same time as the performers and were thus used as a control group. Comparisons showed that these respondents did not differ from low emotional synchrony participants. We conclude that the positive outcomes of collective events are not related to participation in itself, but depend upon the level of emotional synchrony and fusion of identity experienced during the activity.

### 27.03.2014, 11:00-13:00

#### Symposium 1.3

### METHODOLOGICAL ADVANCES IN CONTEMPORARY EMOTION RESEARCH

Olderbak, S., Wilhelm, O., Jack, R., Junge, M. & Hildebrandt, A.

In this symposium we address emotion related behavioral and neurophysiological outcomes relevant for psychosocial processes by presenting several novel methodological approaches. The goal of each presentation is to introduce recent methodological developments and illustrate the utility of these developments for contemporary emotion research. Thus, the symposium has a methodological focus but also includes up to date information on a variety of substantial issues. Olderbak et al. will present a series of experimental tasks designed to elicit individual differences in the ability to express emotions in the face, discuss options for automated emotion expression coding, compare scoring procedures of those codes, and propose a measurement model of emotion expression ability based on emotion codes in younger adults and a psychopathic sample. Wilhelm et al. will expand the discussion of scoring automated facial expression codes by examining the action unit scores produced by automated emotion expression coding software and compare individual differences in the ability to pose and imitate facial expressions. In addition to formative measurement of expressions based on action units, dynamic network modeling will be applied to derive an intra-individual perspective on emotion expression abilities and estimate their relationship with receptive socio-emotional competencies and personality traits. Yack will present two studies using a novel psychophysics-based 4D computer graphics platform – the Generative Face Grammar (Yu et al., 2012). She will demonstrate cultural specificity of facial expressions and show how dynamically transmitted socio-emotional information through facial expressions fits evolutionary pressures. Junge and Reisenzein will present an estimation of metric scale values on the basis of graded pair comparisons using maximum likelihood difference scaling (MLDS) to provide a more suitable quantitative measurement of subjective emotional experiences. Finally, Hildebrandt et al. will present Latent Difference Score Models for investigating individual differences in eventrelated brain potentials in components that are defined as difference waves and report brain-behavior relationships in the domain of facial emotion perception.

## ASSESSING INDIVIDUAL DIFFERENCES IN EMOTION EXPRESSION ABILITY BASED ON SOFTWARE CODED EMOTION SCORES

#### Olderbak, S., Hildebrandt, A., Wilhelm, O., Geiger, M. & Sommer, W.

Interpersonal abilities include the ability to both perceive and express emotion in the face. Recent advances in the development of automated emotion expression coding software programs has facilitated the coding of facial emotion expressions, providing researchers with improved tools to assess individual differences in the ability to express emotion in the face. We will present a brief discussion of automated emotion expression coding software followed by an evaluation and comparison of several methodologies to treat (e.g. loess smoothing) and score (e.g. average, max score) these data. In addition, we will present experimental tasks designed to elicit individual differences in the ability to express emotion in the face, followed by a measurement model of emotion expression ability. Finally, we will present on potential deficits in emotion expression ability in subpopulations typically defined as deficient in emotion related abilities, by illustrating performance in psychopathic populations.

# EXPANDING THE DISCUSSION OF ASSESSING EMOTION EXPRESSION ABILITY WITH A FOCUS ON ACTION UNITS

### Wilhelm, O., Hildebrandt, A., Sommer, W., Schinkel, S. Olderbak, S.

Facial expressions are a crucial tool for communicating emotional states. Although prominent theories of interpersonal abilities include individual differences in expressing emotions, measurement approaches are in its infancy. Due to the computational and methodological challenges associated with the evaluation of facial expressions we focus on computer-assisted approaches. We will discuss the use of action unit scores, produced by automated emotion expression coding software, in the assessment of individual differences in the ability to pose and imitate facial expressions. With a sample of 270 young adults we test formative measurement models based on critical action unit configurations. Additionally, we present networks of action units in normative-actual comparisons and derive an intra-individual perspective on emotion expression. The person parameters from all approaches are related with convergent and discriminant covariates. In the discussion we will provide methodological and psychological recommendations for the assessment of individual differences in facial emotion expression.

## MODELLING DYNAMIC FACIAL EXPRESSION SIGNALS USING A DATA-DRIVEN **METHODS**

#### Jack, R., Garrod & O., Schyns, P.

Emotion communication is achieved primarily by exchanging a set of signals - facial expressions. Understanding the precise nature of these signals is fundamental and has long been a focus in facial expression research (e.g., Darwin, 1872; Ekman & Friesen, 1978). Recently, data-driven approaches from traditionally distinct fields (e.g., visual cognition) have been used to examine facial expression signalling. Here, I present two studies using a novel psychophysics-based 4D computer graphics platform – the Generative Face Grammar (GFG, Yu et al., 2012) – that combines subjective perception with reverse correlation to model dynamic 3D perceptual expectations of facial expression signals.

Cultural specificity in facial expressions of emotion. 'Universal' facial expressions elicit low recognition accuracy in East Asian observers, reflecting cultural specificity in facial expression signals. To investigate, we modelled the dynamic 3D perceptual expectations of the 6 classic facial expressions of emotion - i.e., happy, surprise, fear, disgust, anger and sad – in 15 Western Caucasian (WC) and East Asian (EA) observers. Whereas WC models form six distinct emotion clusters, EA models overlap between categories. Spatio-temporal analyses reveal only EA signal emotional intensity with early eye activity. Here, we demonstrate clear cultural specificity of facial expressions and question the notion of a universal set of six basic emotion categories.

Facial expressions of emotion transmit an evolving hierarchy of signals over time. Facial expressions transmit sequences of information across time, achieving optimal signalling and decoding. Here, we show that dynamic face signalling transmits information hierarchically. We modelled the dynamic 3D perceptual expectations of the 6 classic facial expressions in 60 WC observers. Applying Bayesian classifiers across time, early face signalling produces confusions (e.g., fear/surprise), due to shared Action Units (AUs; e.g., eye lid raiser). Later diagnostic AUs (e.g., eye brow raiser) produces accurate discrimination. We conclude that the information transmitted fits evolutionary pressures: early shared AUs signal fewer, broader categories (e.g., danger), later distinguished as six categories (e.g., surprise).

### METRIC SCALES OF EMOTION INTENSITY

#### Junge, M. & Reisenzein, R.

We tested whether measurements of emotion intensity obtained with an indirect scaling method, based on graded pair comparisons, satisfy the axioms of an additive difference structure (Krantz, Luce, Suppes, & Tversky, 1971) and thus can be regarded as metric scales. Study 1 focused on sensory pleasure and disgust, Study 2 on surprise and amusement, and Study 3 on relief and disappointment. For each emotion, participants were presented with all possible pairs of a set of emotion-eliciting stimuli and asked to state, in each trial, which of the two elicited emotional experiences was more intense, and how much more intense it was. The underlying emotion intensities were then estimated from the the graded pair comparisons using maximum likelihood difference scaling (MLDS). Two central axioms of additive difference structures were tested, the weak mononicity axiom (six-point condition) and the equal-spacing axiom (which holds for finite, equally spaced difference structures). For all emotions studied, most participants were found to satisfy the axioms up to the level of random error, suggesting that the MLDS based on graded pair comparisons allows to measure emotional experience on a metric (interval) scale level. Interindividual differences in the number of axiom violations may reflect differences in the ability of emotional introspection.

## ESTIMATING INDIVIDUAL DIFFERENCES IN EMOTION RELATED ERP DIFFERENCE **COMPONENTS – A LATENT DIFFERENCE-SCORE MODELING APPROACH**

Hildebrandt, A., Völkle, M., Recio, G., Wilhelm, O. & Sommer, W.

Structural equation modelling of change is a widely used technique in behavioural sciences. There are also a few applications to event-related brain potentials and neuroimaging data. In this talk we will exemplify the usefulness of Latent Residual and Latent Difference Score Models for investigating individual differences in event-related brain potentials on components that are defined as difference waves and have been related to emotion processing. The models will be used to study brain-behavior relationships in the domain of facial emotion recognition. Psychophysiological studies have identified several components reflecting processing steps of emotional faces. Around 200 ms after stimulus onset (a face showing a specific emotional expression), the early posterior negativity (EPN) is considered an index of early visual encoding. Following the EPN, the late positive complex (LPC) reflects elaborate processing of emotional stimuli. N = 269 younger adults completed three tasks measuring emotion perception. Electroencephalographic recordings were taken from a subsample (N = 102) during an independent emotion classification task for short videos displaying six basic emotions. With this data we will show how and why Latent Difference Score Models are better suited to investigate individual differences in the EPN and LPC as compared with manifest difference scores under varying reliability conditions.

27.03.2014, 11:00-13:00

### Symposium 1.4

# FEAR AND LOATHING AND COGNITION: THE IMPACT OF ANXIETY ON PERCEPTION, LEARNING AND MEMORY

Rossi, V., Gamer, M., Andreatta, M., Wieser, M. & Weymar, M.

Anxiety disorders constitute a large worldwide health problem with extensive social and socio-economic consequences. In the recent decades it has been become more and more evident that anxiety and fear have massive detrimental effects on both perception and learning processes. Anxiety has been linked to attentional biases and reduced attentional control as well as altered fear learning. It has been found, for instance, that anxiety impairs the ability to think and concentrate as it leads to enhanced early reactivity to emotional stimuli. In the same vein, avoidance of threatening stimuli at later stages of perception has been observed, ultimately leading to the proposal of a hypervigilance-avoidance pattern of attention allocation in anxiety disorders. Also, anxiety alters the mechanisms of affective learning such that both acquisition of fear learning and conditioned responding during extinction is increased. These learning biases are thought of constituting potential factors in etiology and maintenance of anxiety disorders. Additionally, stress and anxiety have been found to foster the encoding of aversive information, which might be a causal factor in the development of disorders such as PTSD. As potential neurobiological correlate dysfunctional amygdala-prefrontal connectivity has been proposed which also supposedly alters sensory gain in early visual and auditory cortical areas. In this symposium, perspectives from different human paradigms and methodological approaches will be given on these phenomena. Valentina Rossi demonstrates in central detection task experiments using high-density EEG that state anxiety alters sensory gating already in early visual areas such that task-irrelevant threatening information elicits larger C1 amplitudes in the event-related brain potential (ERP). This reduced filtering capacity under anxiety may explain hyperreactivity to threat. Matthias Gamer reports on the association of amygdala activity and early attentional bias to the eyes of human faces, and presents data on socially phobic patients who show hyperscanning of the eve region as a potential threatening feature of the human face in social interactions. Influences of trait and social anxiety on affective learning are presented in the following two talks: Marta Andreatta talks about differences of phasic and sustained fear induced by fear conditioning and the influence of trait anxiety on cue and context conditioning. In two studies, brain responses (fMRI) and startle reflex were assessed in virtual reality (VR) context conditioning paradigms. Trait anxiety was shown to be associated with facilitated learning of contextual threat. Matthias Wieser will then present electro-cortical data (steady-state evoked potentials, ssVEPs) on social conditioning and how socially anxious individuals have difficulties in discriminative learning. Using socially relevant stimuli as UCS, short-term visual cortex plasticity changed dependent on the CS-UCS associations in low socially anxious individuals only. Finally, Mathias Weymar shows data on how acute stress and anticipatory anxiety modulate emotional memory such that information is better encoded under stress and anxiety. This comes also along with substantial changes in ERP correlates of recognition memory. Taken together, the five talks in this symposium provide further evidence that anxiety is strongly associated with detrimental effects on all types of cognitive processes from very early perception and attention to affective learning and memory. The results also point at a substantial imbalance in brain circuits subserving saliency detection and attentional and cognitive control, which may ultimately also lead to facilitated reactivity in sensory cortical areas and deficient filtering mechanisms.

# STATE ANXIETY AND THREAT CONTENT INTERACTIVELY MODULATE ATTENTION SELECTION IN PRIMARY VISUAL CORTEX

#### Rossi, V. & Pourtois, G.

State anxiety can interfere with attention control and potentiate sensory vigilance. It is not established yet, however, whether anxiety-driven hypervigilance can also override the early filtering of irrelevant information normally observed during demanding tasks, as early as in primary visual cortex (V1). Moreover, no clear consensus has been reached yet regarding how the attentional system dynamically gates processing in V1 depending on task demands, state factors and threat content concurrently. Here we present results of a series of high density-EEG studies showing reliable effects of state anxiety on sensory gating of neutral and threatening information in V1. Consistently across studies, healthy participants performed several blocks of a detection task at fixation (both high and low in perceptual load) prior to and during the experience of state anxiety. Concurrently, neutral or threatening distractors were briefly presented in the upper visual field, orthogonally to the difficulty level of the central task and to the anxiety condition. Modulations in early attention allocation in V1 were quantified by means of the amplitude of the C1 component generated in response to these irrelevant peripheral stimuli. Results showed that high perceptual load at fixation led to a reduction of the C1 amplitude for neutral irrelevant information, as compared to the low load condition. However, in case of threatening distractors this normal filtering effect was abolished. By contrast, when load and anxiety were increased concurrently, the effect of load at the level of the C1 was attenuated for all stimulus types (also neutral ones) while threat-related stimuli elicited a larger C1. These results suggest that state anxiety can overcome load-driven attention filtering effects occurring in V1 rapidly following stimulus onset, consistent with sensory hypervigilance. Moreover, these effects appear to be exacerbated for threatening, albeit task-irrelevant, information, suggesting early prioritization of this specific content during state anxiety.

## FUNCTIONAL ROLE OF THE AMYGDALA DURING FACE PROCESSING IN NORMAL AND IMPAIRED SOCIAL FUNCTIONING

#### Gamer, M.

The amygdala is reliably activated by facial expressions but the precise functional relevance of such activity change is not well understood because most previous studies did not allow for separating effects of the emotional expression from the distribution of specific facial features and neglected corresponding attentional processes. To remedy such confounds, we developed a novel experimental paradigm that allows for isolating attentional aspects by manipulating the initial fixation that participants make on emotional facial expressions and quantifying subsequent gazing behavior with respect to reflexive and sustained attentional processes. In a series of experiments, we demonstrated that human observers show a preference for attending to the eye region across different emotional expressions. This early attentional bias was linked to amygdala activity, and was found to be most pronounced for fearful faces and less pronounced for happy facial expressions. Thus, humans show a tendency to automatically attend to facial features that are diagnostic of the current emotional state of conspecifics. Moreover, a patient with selective unilateral amygdala loss failed to show reflexive shifts of attention while exhibiting a normal pattern of visual attention during longer viewing durations. Consistent with the frequently observed hyperactivity of the amygdala in social anxiety disorders, these patients showed hyperscanning of the eye region along with a normal sensitivity to diagnostic facial features. Taken together, these findings underscore the functional relevance of the amygdala in driving attentional orienting to specific facial features and they are highly relevant to link to dysfunctions in amygdala circuits to abnormal gazing patterns which were observed in several psychiatric disorders.

### PHASIC VS. SUSTAINED FEAR IN HUMANS AND THE INFLUENCE OF TRAITS ANXIETY

#### Andreatta, M., Glotzbach-Schoon, E., Tröger, C., Wiemer, J., Mühlberger, A. & Pauli, P.

Contrary to specific phobia, which is an irrational transient fear of certain objects, panic disorders (PD) and posttraumatic stress disorders (PTSD) represent long-lasting states of apprehension about having another panic attack or re-experiencing the trauma. Context conditioning has been suggested as a good model for sustained fear and for PD and PTSD. Our goal was to disentangle the neural underpinnings of transient and sustained fear in humans and to investigate the role of anxiety traits in "sustained-fear" learning. All participants underwent context conditioning, in which an aversive electric stimulus (unconditioned stimulus, US) was unpredictably delivered in a virtual office (CXT+), but never in another office (CXT-). Study 1: Transient fear was assessed by modeling the neuronal activity to the context onsets, while sustained fear was assessed by considering the neuronal activity throughout the entire context. We found specific activation in dorsal striatum, orbitofrontal (OFC), dorsomedial (dmPFC) and dorsolateral prefrontal cortex (dlPFC) for transient fear, and in amygdala and hippocampus for sustained fear. Common activations were revealed in insula, middle temporal gyrus and primary motor cortex (M1). Possibly, entering a threatening context induces fear reactions (insula, M1), recalls contingency awareness (striatum, dIPFC) and threat appraisal (dmPFC, OFC). Whereas, being in a threatening context implies anxiety-like responses (amygdala, insula, M1) and the generation of a spatial map to predict threat's occurrence (hippocampus). Study 2: The modulatory role of trait anxiety was assessed with startle response in high- and low-anxious individuals. High-anxious participants showed potentiation of startle response to CXT+ compared to CXT- already after few learning trials. Thus, high-anxious individuals may be particularly sensitive to diffuse threat and consequently they showed faster conditionability to the threatening context. In conclusion, transient and sustained fears are two conceptual and neuronal distinguishable states, which may be differentially and specifically modulated by individual anxiety traits.

## WHO'S YOUR FRIEND? DEFICITS IN DISCRIMINATIVE SOCIAL CONDITIONING IN SOCIAL ANXIETY

#### Wieser, M.

Fear conditioning provides a model for the etiology of (social) anxiety disorders. Normally, the unconditioned stimulus (UCS) in fear conditioning paradigms consists of highly aversive stimuli such as electric shocks and loud aversive noise. While these have been shown to be highly effective in eliciting fear responses, one may question their ecological validity as humans rarely encounter them in daily life. Thus, we used nonverbal social gestures and auditory verbal feedback as UCS in two social conditioning paradigms together with steady-state evoked potentials (ssVEP) methodology to further elucidate the role of social UCS in discriminative fear learning and its electrocortical correlates. Furthermore, its potential modulation by social anxiety was investigated. In study 1, faces were paired with negative, neutral, or positive nonverbal gestures, while high density EEG was recorded. To elicit ssVEPs in response to the faces which served as CS (CSneg, CSneu, CSpos), the face stimuli were presented in a flicker mode at 12 Hz for 5 seconds. Amplitudes of the face-evoked ssVEP revealed larger cortical mass activity in response to faces both paired with negative and positive compared to neutral hand gestures indicating successful affective learning and concomitant short-term plasticity in visual cortex depending on the learning experience. In a second experiment, high (HSA) and low socially anxious (LSA) participants underwent a similar social conditioning paradigm, where the UCS consisted of negative, neutral, and positive verbal feedback. Whereas the LSA showed elevated cortical amplitudes to the CSneg compared to the CSneu faces, the HSA group did not differentiate cortically between the three types of CS faces. This may point at deficits in social anxiety to discriminate between friend and foes and potentially explain why socially anxious persons tend to avoid social interactions in general.

# EFFECTS OF STRESS AND ANXIETY ON EMOTIONAL EPISODIC MEMORIES: INSIGHTS FROM EVENT-RELATED POTENTIALS

Weymar, M., Wirkner, J., Bradley, M. & Hamm, A.

Both animal and human research suggests that stress-inducing contexts can facilitate memory. In the present studies we investigated the effects of cold pressor stress and anticipatory anxiety (threat of shock) on subsequent recognition memory assessing the parietal ERP old-new effect as an electrophysiological correlate of successful episodic recollection. We found that exposure to acute stress prior to encoding of emotional and neutral pictures increased the ERP old-new effect (500-800 ms) during recognition of emotional, but not neutral pictures. These enhanced old-new differences for emotional scenes were particularly pronounced in participants reporting extensive subjective stress experience. In another study, we found that words encoded in the context of anticipatory anxiety (shock threat), compared to safety, was associated with enhanced old-new ERP difference and better recognition, most reliably for emotional words. The data of the present studies indicate that emotional information encountered during or after aversive contexts are better recollected than information encoded during safety, which could assist in understanding effects of anxiety and stress on memory processes in healthy and clinical populations.

27.03.2014, 13:00-14:30

Poster Session I

# 1. SEX DIFFERENCES IN THE RELATIONSHIP BETWEEN EMOTIONAL INTELLIGENCE AND THEORY OF MIND

Batchelder, L., Brosnan, M. & Ashwin, C.

Background: Emotional intelligence (EI) involves various skills including self-awareness (intrapersonal scale) and other-awareness (interpersonal scale). Previous research has shown that males report higher self-awareness and independence, whereas females report stronger empathy and interpersonal relationships. However, little research has investigated sex differences in EI skills and Theory of Mind (ToM).

Objectives: The present study investigated relationships between the interpersonal and intrapersonal scales of EI with ToM in males and females. It was hypothesised that interpersonal EI would be positively associated with ToM in females, while intrapersonal EI would be positively associated with ToM in males.

Methods: Participants consisted of 94 typically developed adults, comprised of 50 females (mean age = 28.54, SD = 9.32) and 44 males (mean age = 25.11, SD = 8.51) recruited via opportunity sampling at the University of Bath. All participants completed the Emotional Quotient Inventory (EQ-i) for EI, and the Reading the Mind in the Eyes (RMIE) task for ToM.

Results: Correlational analyses revealed a positive relationship between the interpersonal EQ-i scale and RMIE scores in females (r = 0.38, p < 0.01), and a positive relationship between the intrapersonal EQ-i scale and RMIE scores in males (r = 0.32, p < 0.05). In addition, females showed a positive correlation between stress management and RMIE (r = 0.30, p < 0.05).

Conclusions: Males showed a relationship between ToM and EI related to self-focused skills, while the relationship in females was related to other-focused skills. ToM performance in females may be related to utilizing EI skills involving the awareness and understanding in how others feel and control emotions. This could indicate how ToM ability increases the ability to successfully integrate within social support networks in females. On the other hand, ToM performance in males is more related to self-awareness of emotions and reduced emotional dependency on others.

# 2. THE ROLE OF EMOTION-SPECIFIC RESOURCES IN CROSS-MODAL PROCESSING OF **EMOTIONAL STIMULI**

### Bayot, M. & Vermeulen, N.

One of the most predominant activities we perform in our daily lives, as social beings, is communication, in which emotions seem a crucial component. Importantly, and as emphasized recently, most of our social interactions involve combining information from both the face and the voice of other persons. Although cross-modal processing of emotions (i.e., the simultaneous processing of affective stimuli coming from at least two different sensory channels) is a highly common human process, still very little is known about what it depends on. Because, efficient cross-modal binding seem to require the activation of the same brain regions involved in the management of emotion-specific resources (ACC and amygdala), we hypothesize that efficient integration of emotions from different modalities would depend on the availability of emotion-specific resources.

By applying several paradigms that hamper the availability of affective or cognitive resources (e.g., a resource consuming task added in parallel to the main emotion categorization task), we found that cross-modal stimuli were processed less efficiently. For example, in the first study we found that the generally observed cross-modal facilitation effect (i.e., cross-modal emotional stimuli lead to better emotional categorization performance in comparison to unimodal stimuli) disappeared in all the resource-load conditions in comparison to baseline (i.e., emotional categorization task alone).

The role of emotion-specific resources in the integration of cross-modal emotional information will be discussed in the light of methodological concerns and new lines of research will be pointed out.

## 3. FROM FAST VISUAL PERCEPTION TO FRONTAL EMOTIONAL INHIBITION

#### Beffara, B., Vermeulen, N., Bret, A. & Mermillod, M.

Research in visual cognition suggests that prediction during visual categorization could be permitted thanks to an early activation of the prefrontal cortex (Bar, 2004). However, even if the temporal steps of brain activations are clearly observable by means of magnetoencephalography (Bar, 2006), it is difficult to conclude about a top-down functional action of the prefrontal lobes for cognitive tasks that does not require executive functions, especially in the case of emotional processes. We carried out an experiment to test this possible top-down effect during recognition of emotional facial expression (EFE). As this model relies on the selective use of different spatial frequencies by the orbitofrontal cortex, we based our experiment on the spatial filtering of stimuli. Through an emotional stroop task, we showed an advantage of LSF (low spatial frequency) priming for target recognition involving top-down inhibition, compared to HSF (high spatial frequency) EFE. We did not observe this advantage in the case of recognition without inhibition.

## 4. SCOPE AND STRUCTURE OF EMOTION TERMS IN MEDIA RECEPTION

#### Bleuel, F.

Emotions that can be elicited during media reception are called media emotions, macro emotions, meta emotions, audio visual emotions, artifact and fiction emotions, reception emotions, visual emotions, narrative emotions or aesthetic emotions. Many terms are used to describe emotional media experiences. This seems to indicate that we can experience a variety of emotions during media reception or that different media are able to elicit different qualities of emotions. Therefore, the aims of the paper are to explore the scope and the structure of emotions elicited during media reception, and to discuss if such distinctions are meaningful.

The term media emotions can be understood as an umbrella term under which all the different terms for emotions can be subsumed. In this structure macro emotions and meta emotions occur on a more general level as an overall or meta evaluation of reception enjoyment and reception experiences. On the level of a concrete reception process we can differentiate between two very close levels. Reception emotions refer to elicited emotions during and after the reception process. The term is integrated on an intermediate level because it allows subsuming different reception situations and in consequence different media like film or photos. An analysis of the other terms shows that they are simply chosen according to specific media content, for example audio visual emotions for audio visual content.

A further question arises: Do these terms imply media specific subgroups of emotions that differ from common emotions? Contrary positions exist concerning this question. Müller and Kappas (2010, p. 311) argue that "it does not make sense to create concepts such as peanut butter and jelly emotions, there is no reason to talk about film emotions as a separate entity." A contrary position comes from Früh (2002, p. 207) who states that media induce "as-if-emotions", which are cold emotions that could not have the same intensity as real existential ones. We suggest that a mediate position offers the most appropriate explanation. Even though media-induced emotions are processed in the same way as naturally occurring emotions, they may differ in several aspects. Content-related as well as formal features may initiate and influence media specific appraisal processes (Unz, 2010; Bleuel, 2011, 2010).

## 5. EMOTION-COGNITION-MOTRICITY INTERACTION

#### Charvin, H.

Knowledge on emotion takes a long time to be stabilized, with not uniform epistemological setting (Plutchick, 1980, 2001). The actual controversies focus on the primacy of cognition on emotion or the inverse (Franck et al., 2001; Pichon & Vuillermier, 2011; Sanders & Scherrer, 2008). But, no sufficient question emerges about the implication of motricity in interaction with emotion and cognition. For some years, our team purposes to evaluate the sensitivity of emotion with a scale constructed on the main hypothesis that no behavior can be expressed without an interaction between emotion, cognition and motricity. In the case of emotional behavior, we purpose that emotion is structured from the more cognitive expression to the more emotional and motor expression.

To test this hypothesis, we constructed the Multiple Emotional Sensitivity Scale (in course of validation) on the base of two concepts. First, we suppose that perception of emotion (feeling) predominantly implies emotion, when understanding (facial emotional expression recognition) is conjointly implicating emotion and cognition and finally, emotion expression regulation predominantly implies cognition (feeling metacognition and regulation). Secondly, we suppose that the intensity of emotion is graduated from the more cognitive to the more emotional and motor. For example, the gradient passes from annoyance to irritation and then, exasperation, anger and rage.

We proposed a computerized evaluation of emotional sensitivity, presenting daily life visual expression of the 6 Ekman emotions and a continuous scale of sensitivity graduated by 5 successive labels constructed on the same concept that the exemple of anger. Neutral images were conjointly presented with each of the 6 series of emotion. Participants were evaluated on perception, understanding and regulation of emotion expression.

At this time, we have tested the scale with healthy young and old adults, Alzheimer patients and sexual offenders. The different measures will be presented during the session.

# 6. THE EFFECT OF EMPATHY ON RECOLLECTIONS OF PARENT-CHILD **RELATIONSHIPS**

Daughters, K., Manstead, A. & Van Goozen, S.

The parent-child relationship established at birth can last for a lifetime. Throughout this time,

however, the valence of the relationship can change. Research has shown that it is not only factors directly related to the parent-child relationship that can affect the way the relationship is recalled. Current emotional state, which may result from unrelated factors, can bias the

way information about the relationship is recalled. The present study investigated the effect of

state empathy on the way in which participants recalled information about their relationships with their parents. One hundred and fourteen college students took part in the study. After watching one of two 3-minute videos, designed to manipulate emotional state, participants were asked to rate their state empathy, and to complete a questionnaire measuring the positivity of their relationships with their parents. We found an indirect effect of the emotion manipulation on participants' recollections of their relationships with their parents. Participants who watched the experimental video had significantly higher state empathy scores, compared to control participants; in turn, participants with a higher state empathy score recalled their relationships with their parents more positively, by comparison with participants who had a lower state empathy score. These findings are consistent with previous literature showing that one's current emotional state can affect the way in which individuals recall established relationships.

## 7. THE ROLE OF EMOTIONS IN THE LEARNING OF SOCIAL STANDARDS

#### Elkabetz, S., Hareli, S. & Hess, U.

Social communication is very much dependent on emotional reactions of the parties involved (Ekman, 1972(. These reactions provide significant information on various aspects related to the interacting parties and the context in which the interaction took place (Trope, 1986). Accordingly, emotions expressed by one person serve as a source of social information for an observer. This information is about the situation in which that emotions were expressed on and about the expresser, including about his or her characteristics )Hareli & Hess, 2011(. Indeed, emotions can be seen as social messages describing how the expresser viewed the circumstances that brought about the emotion (Hareli, Harush, et al, 2009; Hess, Blairy, et al, 2000; Knuston, 1996; Van Kleef, et al, 2004a, 2004). This is why an observer of that emotion can use the information contained in the emotion to make sense of the specific situation in which the emotion was elicited. This has been shown to be the case in different contexts, among other things, in the context of learning new social norms (Hareli, Moran-Amir, David, & Hess, in press).

Following up on this idea, the present research focused on the learning of standards from another's emotions. We assumed that emotions that are associated with an appraisal that something exceeds a known or ordinary frame of reference including a known standard, would be a more effective in social learning of norms than other emotions which do not contain such an appraisal. Such is the case of awe which is associated with the appraisal of vastness, that is, a perception that something exceeds one's ordinary frame of reference (Keltner & Haidt, 2003). To test this assumption, in a vignette study participants became aware of a performance of a person in an unfamiliar game and to observers' emotional reactions to this performance. Observers, who were either fans of the player, fans of a rival or fans of neither of these, expressed awe, happiness or neutrality in reaction to the performance. Results confirmed our expectations as more participants who knew that the observer responded with awe learned the standard than in the other conditions. This further indicates the role of emotions in making sense of situations and the role of appraisals in this process.

# 8. THREATENING TRIANGLES: THE INFLUENCE OF ANGULAR STIMULI ON THE **BREADTH OF ATTENTION**

### Gryc, O. & Hareli, S.

Perspectives of situated cognition suggest that processing style can be attuned to meet situational demands with benign situations leading to broader, more global processing while threat leads to the adoption of a narrower, more detail-oriented processing strategy (Schwarz & Clore, 2007). In a comprehensive review it has recently been suggested that even implicit affective cues – cues which have come to be associated with threatening situations – may narrow the breadth of cognition (Friedman & Förster, 2010).

The present paper presents the results of a study focusing on one such cue - angularity, which was shown to be strongly associated with threat (Aronoff, Barclay, & Stevenson, 1988; Bar & Neta, 2007) - and which examined whether exposure to angular shapes can narrow the scope of perceptual attention.

Breadth of attention was assessed using a variant of Navon's (1977) letter task which measures reaction times to global (the larger figure in a composite stimulus) and local (the smaller elements in a composite stimulus) targets. Angularity was manipulated between subjects through the presentation of angular or curved primes. Commonly in the Navon task participants respond faster to global targets, a finding referred to as global precedence (Navon, 1977; Kimchi, 1992). Results indicated that while participants who were exposed to curved primes did indeed respond faster to global rather than local targets, the advantage for global targets was eliminated in the angular condition – suggesting that participants' scope of attention was narrowed in this condition.

These findings are in concert with Friedman and Förster's (2010) assumption that a simple threat-connoting perceptual cue such as angularity, may impact the breadth of attention in a manner similar to that of explicit threat and other implicitly affective cues such as the enactment of avoidance (Förster, Friedman, Özelsel, & Denzler, 2006) and the color red (Mehta & Zhu, 2009).

# 9. PAIN AND EMPATHY: THE EFFECT OF SELF-ORIENTED FEELINGS ON THE DETECTION OF PAINFUL FACIAL EXPRESSIONS

### Grynberg, D., Maurage, P.

Background: Painful facial expressions have been shown to trigger affective responses among observers. However, there are so far no clear indications about the self- or other-oriented nature of these feelings. The purpose of this study was to assess whether facial expressions of pain are associated with other-oriented feelings (empathic concern) or with self-oriented feelings (personal distress). Method: To this aim, 70 participants took part in a priming paradigm in which ambiguous facial expressions of pain were primed by words related to compassion, distress, negative or neutral words. It was hypothesized that distress-related words might, as compared to compassion, negative and neutral ones, facilitate the detection of pain in ambiguous facial expressions of pain. Results: The results showed an effect of prime on the response time to answer "pain" in response to ambiguous facial expressions of pain (i.e., morphed with a neutral facial expression). More specifically, the detection of pain was faster when preceded by distress primes than by negative ones. Conclusion: The present study globally supports that painful expressions are related to self-oriented feelings of distress and might suggest that their threat value accounts for this effect.

# 10. THE ROLE OF EMOTION TRANSITIONS FOR THE PERCEPTION OF SOCIAL DOMINANCE AND AFFILIATION

### Hareli, S., David, S. & Hess, U.

Emotions unfold and change over time. However, the question of how the dynamics of emotions affect emotion perception remains understudied. The present research demonstrates that the sequence in which expressions of sadness and anger are shown affects not only ratings of emotion intensity but also inferences of dominance and affiliation. However, the sequence in which expressions were shown did not affect perceptions of intensity and inferences in the same way. Rather, inferences were determined by the match between the sequence in which emotions are shown and the perceived likelihood that an emotion would be shown by the sender. Further, changes in emotion expression were preferentially attributed to situational variations rather than to coping attempts on the part of the expressers.

## 11. IMPROVING THE ABILITIES TO PERCEIVE AND REGULATE EMOTIONS THROUGH TRAINING

#### Herpertz, S. & Schütz, A.

Work Objectives: Previous research has shown that emotional intelligence (EI) is related to well-being, mental health, and professional success (for a review, see Brackett, Rivers, & Salovey, 2011). The present study aimed to develop and evaluate a training program for improving the abilities to perceive and regulate emotions.

Methods: The intervention includes evidence-based methods from educational research such as group discussions and role play (Kolb & Boyatzis, 1970), exercises for self-observation (Bandura, 1997), and theoretical input from the trainers. The intervention was designed to improve (a) the ability to identify others' emotions on the basis of facial expressions, body language, and voice as well as (b) the ability to identify one's own emotions and reflect on one's own emotional experience. Furthermore, participants practiced (c) the ability to regulate their own emotions by using coping and relaxation exercises and exercises from positive psychology as well as (d) the ability to regulate others' emotions on the basis of exercises derived from the literature on impression management, social competence, and communication. To increase the transfer effect, all participants received photo-based documentation, a summary of the theoretical input, and a weekly email for one month after the intervention.

To evaluate the effects of the training, a sample of 115 business students took part in either an 8-hr emotioncompetence training (experimental group) or a time-management training (control group). Pre- and two postintervention measures from the training group and the controls were evaluated.

Results: Positive effects were found in the training group from the pre-assessment to the post-assessment (1 month following the intervention) with respect to the abilities to perceive and regulate emotions, but not in the control group.

Conclusions: Findings suggest that the abilities to perceive and regulate emotions can be improved through training. Potential applications for such a training program are discussed.

# 12. BELIEVING IS SEEING: THE IMPACT OF EXPECTATIONS ON EMOTION **RECOGNITION IN MINIMAL FACIAL EXPRESSIONS**

### Hühnel, I., Sangenstedt, S., Dietrich, J. & Hess, U.

In face-to-face interactions, people attend to the emotional states of others. For the judgment of these states observers tend to rely on the facial expressions themselves as well as information provided by the context, such as gender, social group or the situation, which then again can lead to different expectations about the person. Therefore, in the present study we looked at the impact of expectations about emotion expressions on emotion recognition. Expectations were manipulated by context information we provided. In order to reduce context information that is innate to real human faces we presented drawings of stick figure faces. In a between-subjects design, the supposed source of the stick figures drawing was manipulated by the cover story, that the drawings were either created by children, or by a computer program or by a stroke patient. Participants were asked to first rate how well the emotion expressions were drawn and then to judge the expression. Results showed that the rated drawing success varied significantly between the three groups. Furthermore, emotion recognition also varied between the groups and the emotion recognition was mediated by the rated drawing success. For example, when participants judged the stick figures as poorly drawn, emotion recognition was reduced. This suggests that the expectations people hold about the emotion expression ability of another person influences what they actually perceive.

# 13. INTERACTIONS BETWEEN PHYSIOLOGICAL AROUSAL AND PROCESSING OF **EMOTIONALLY AROUSING STIMULI**

#### Kever, A., Vermeulen, N. & Eeckhout, C.

Nowadays, the idea of a reciprocal influence of physiological and psychological processes seems to be widely accepted. For instance, current theories of grounded cognition suggest an inherent link between conceptual processing and neural activation of sensory-motor areas. In line with this framework, the present study aimed at investigating the interactions between physiological arousing conditions and the attentional processing of emotionally arousing words.

For this purpose, participants realized 3 blocks of attentional blink (AB) trials, once after a baseline session, once after a cycling session and once after a relaxation session. Concretely, participants were asked to detect and report two target words (T1 and T2) presented for 67 ms each among a series of nonword distractors. The SOA between target words was set to 268 ms. T1 were always neutral (e.g., chair) whereas T2 were either neutral, high arousal (e.g., orgasm, herpes) or low arousal (e.g., friend, tear) words. The results revealed a significant interaction between the arousal states of our participants and the type of T2 words reported. More precisely, increasing physiological arousal after the cycling session led to improved reports of high arousal T2 words, while reduced physiological arousal after the relaxation session led to improved reports of low arousal T2 words. Importantly, neutral T2 remained unaffected by the arousing conditions. In conclusion, these findings emphasize that previous levels of physiological arousal modulate the access to congruent or incongruent emotional concepts.

The present study provides evidence for existing interactions between sensory-motor and cognitive processes. More precisely, it shows that physiological arousal facilitates the processing of arousal-congruent concepts.

# 14. PERFECTIONISM AND EMOTIONAL REACTIVITY: A MEDIATOR ROLE OF UNCONSTRUCTIVE REPETITIVE THINKING.

### Kornacka, M. & Douilliez, C.

Perfectionism is nowadays considered as a transdiagnostic process. Although its impact on emotional reactivity, emotional regulation and psychopathologies is widely explored (Egan, Wade, & Shafran, 2011), the studies are not consistent about the role of intra and interpersonal dimensions of perfectionism. The first aim of this study was to explore how social and intrapersonal dimensions of perfectionism, respectively Socially Prescribed Perfectionism (SPP) and Self-Oriented Perfectionism (SOP) from Hewitt and Flett's model (1991), affect emotional reactivity after a failure experience. As, according to previous studies, rumination can be a potential mediator of this link, the second, and the main goal of this study, was to test how unconstructive repetitive thinking affects the link between perfectionism and emotional reactivity. The strength of the present study is the use of a new transdiagnostic approach to repetitive thinking—the processing mode theory (Watkins, 2004)— suggesting that each individual can use two alternative modes of repetitive thinking: a constructive (concrete experiential) and an unconstructive one (abstract analytic).

After filling in questionnaires assessing their perfectionism and processing mode in repetitive thinking, 44 nonclinical participants underwent a negative mood induction with pre and post induction affect assessment in terms of dysphoria, anxiety and positive affect.

The results suggested that SOP was correlated with emotional reactivity (i.e., dysphoria and anxiety) after a failure experience, while the SPP was correlated with a change in dysphoria but not in anxiety. The mediation models suggested that the link of both SOP and SPP with dysphoria is fully mediated by abstract analytic thinking. Contrariwise abstract analytic thinking did not mediate the link between SOP and anxiety.

Unconstructive repetitive thinking seems to play a key role in the link between perfectionism and emotional reactivity but only in dysphoria and not in anxiety. Theoretical and clinical implications of the study are discussed.

## **15. THE IMPACT OF MOTION ON THE LIKEABILITY OF A STIMULUS**

Kosinski, T., Chafi, A., Craddock, P., Rusinek, S. & Molet, M.

Given the effect of preferences on behavior, it is critical for psychological researchers to understand how preferences are formed and how they can be influenced. Evaluative conditioning (EC) is a useful paradigm to explore these questions. It is defined as a change in the likeability of a stimulus (conditioned stimulus; CS) that results from its association with either a positive or negative stimulus (unconditioned stimulus; US). Based on studies in behavioral neurosciences and social psychology, it is acknowledged that certain motions can cause different emotions (e.g., like and dislike). The goal of our study was to test whether the likeability of a CS could be determined not by its association with an US but by a specific motion. Six pictures of neutral consumption's products (CSs) were presented in three dynamic ways: 1/ parabolic motion to create a negative emotion, 2/ translational motion because it was hypothesized to be neutral and 3/ wave-like motion to create a positive emotion. Motions' assignation to CSs was semi-randomized. A one-way ANOVA analysis showed a main effect of Motion on CSs evaluative ratings. Findings suggest a preference for CSs presented with a wave-like motion over CSs presented with parabolic or translational motion. These results cannot be explained by mere exposure effect. As far as we know, EC researchers have considered a unique way of creating and changing likes and dislikes by pairing stimuli together. Here, we suggest a new way to establish conditioned likes by using motion.

# 16. SYNCHRONY AND FACIAL MIMICRY AS INDICATORS OF INTERGENERATIONAL **COMMUNICATION QUALITY**

### Kuszynski, J., Hühnel, I., Hess, U. & Asendorpf, J.

Our research addresses real-life interactions between young and older adults: in what ways does young people's behavior differ when they interact with older versus young people? Do they show less empathic reactions to emotional expressions? We study nonverbal behavioral aspects, such as body movements and facial expressions in order to shed some light onto the dynamics of intergenerational communication.

# **17. DEFENSIVE SELF. RELATIONSHIP BETWEEN SELF-EVALUATIONS AND DEFENSE MECHANISM.**

### Kwasnik, M. & Kolanczyk, A.

The aim of presented studies was to investigate the role of self-evaluations in defense mechanism . We assumed that reception and interpretation of negative personality traits changes along with the steps of information processing, depending on self-regulation style. Therefore, reactions on early stages of information processing differ from reactions on more advanced, even though still pre-conscious stages, especially when considering defensive self-regulation.

We verified our expectations using novel version of subliminal affective priming paradigm. In three experiments conducted the same procedure was used, with a change only with regard to stimulus onset asynchrony. Participants evaluated neutral visual targets primed by words (positive, negative personality traits and neutral stimulus) with different SOA (experiment 1 = 116 ms, experiment 2 = 140 ms, experiment 3 = 175 ms). Moreover, in each experiment we used a mirror to intensify self-awareness. STAI questionnaire and Social Desirability Scale were used to identify style of self-regulation under threat: low-anxious LA, high-anxious HA, repressors REP and defensive high-anxious DHA individuals.

Findings from these experiments suggest that receptiveness and interpretation of negative personality traits changes along with the information processing and depends on a style of self-regulation in threat, including defensiveness style. On the first measured stage (116ms SOA) REP evaluated negative traits positively, which could be an indicator of an early attention engagement. They ignored negative traits in the second phase (140 ms) and assimilated them on the last one (175ms) before explicit interpretation. Defensive high-anxious individuals assimilated negative traits early (140 ms) and then (175ms) reinterpreted its meaning (to neutral). These findings are discussed in context of current knowledge about information processing in anxiety (integrative model, Bar-Haim et al., 2007) adopted to interpret relationship between self-evaluations and defense mechanisms.

# 18. THE CLASH OF TWO DEADLY SINS: THE SOCIAL FUNCTIONAL RELATION OF PRIDE AND ENVY

### Lange, J. & Crusius, J.

In competitive situations, winners often display pride and losers might be envious of the other's success. From a social functional perspective, pride communicates higher status. In such situations, perceiving the proud competitor may elicit envy as an adaptive response in the observer that motivates to diminish self-other-differences in success. These interpersonal dynamics of pride and envy have not been studied before.

Pride can either be authentic, when the proud person attributes success to effort, or hubristic, when the proud person attributes success to ability. Envy can either be benign, when the envier tries to level up, or malicious, when the envier tries to level the other down. We predicted that authentic pride displays make a likable impression and communicate prestige, promoting observer's benign envy. In contrast, hubristic pride displays make a less likable impression and communicate dominance, promoting observer's malicious envy.

In Study 1, participants recalled an envy episode, indicated if pride was displayed by the envied person and rated how authentic/hubristic it was. Remarkably, pride was observed in 56% of the cases. In addition, in benign episodes the envied person tended to display more authentic pride and showed significantly less hubristic pride compared to malicious episodes.

In Study 2, pride was manipulated in a vignette with an outperforming student attributing success to effort or ability. An unemotional control group was also included. Observers' envy was more benign in the authentic pride and control condition than in the hubristic pride condition.

In Study 2, both pride conditions – manipulated via a picture plus attribution – were compared on separate benign and malicious scales. Authentic pride displays increased benign and decreased malicious envy, mediated by changes in liking and prestige/dominance.

These results reveal envy's social function in response to other's pride displays and give important insights into emotional dynamics in competitive situations.

## **19. THE MULTIPLE EMOTIONAL SENSITIVITY SCALE (MESS)**

#### Le Chevanton, A., VomHofe, A., Grouin, J. & Charvin, H.

In the objective to evaluate a deficit of indifference, apathy and loss of sensitivity in Alzheimer's Disease, the ICONES laboratory works in the last few years to construct a measure of degrees of emotional sensitivity. Usual tests of emotional sensitivity do not conjointly offer (1) an exact measure of the gradient of sensitivity, (2) a separate analysis of the different processes of emotion, (3) animmediatemeasure of emotion produced by daily life images with context and gesture, not a cognitive interpretation via questionnaire and (4) a self-assessment feasibleby patients. There is why, partially based on Multifactor Emotional Intelligence scale of Mayer, Salovey and Caruso (1999) we built the Multiple Emotional Sensitivity Scale evaluating perception, understanding and regulation of emotion expression. We used 24 images per emotion register, figuring the 6 Ekman emotions (18) plus neutral images (6) presented in acomputerized form. In a first step, we proceeded to a validation of item choice, which conducted us to change firstly 27 images and secondly 6 images in reason of non-normality of distribution and kurtosis. When the construct was stabilized, we asked 313 young adults (189 women), with a mean age of 26 years to indicate on a scale graduated from 0 to 100 the intensity of their sensitivity. At this date, the analysis of internal consistency indicates a Cronbach's alpha of .846 and an inter-item correlation of .245. The first analysis indicates a mean score of sensitivity of 53/100 with a superior score for expression regulation (58/100) than for perception and understanding (49/100 and 51/100 respectively). An ongoing exploratory factor analysiswill provide more information about the structural organization of the scale and will be presented in session.

## 20. EXTREME LIFE-CHANGING EVENTS, IMPACT ON BASIC BELIEFS AND POST-STRESS GROWTH: WHY POSITIVE EVENTS REINFORCE EUDAIMONIC WELLBEING MORE STRONGLY THAN NEGATIVE EVENTS UNDERMINE IT.

#### Martínez-Zelaya, G., da Costa, S., Páez, D. & Bilbao, M.

Research results on the impact of life-changing events show that more recent events, both positive and negative, impact on or at least correlate significantly with indicators of hedonic and eudaimonic wellbeing. This relation is asymmetric, with negative events having greater impact on affect and an effect that is more durable. Positive events, for their part, mainly reinforce eudaimonic wellbeing. Our study shows that positive events reinforce positive basic beliefs much more than negative events undermine them. It was found that negative events transform these beliefs from positive to neutral. On the other hand, positive events transform them from positive into highly positive. It was also found that extreme positive events generate as much growth or flourishing after the change as negative events. The development of new possibilities and changes of life priorities are produced by both positive and negative extreme events. Negative events specifically produce growth effects of reinforcement of personal strength and help people realize that they can depend on others and/or improve their relations with others. Changes in basic beliefs are congruently associated with personal growth in the case of beliefs about the social world and meaning of life, though this did not occur in the case of negative extreme life-changing events, and this calls into question the role of the alteration of basic beliefs as a driver of post-stress growth.

### 21. MUTUAL-AID SUPPORT GROUPS AND EMOTIONAL INTELLIGENCE

#### Monaci, M. & Scacchi, L.

The research was conducted within mutual-aid support groups with the main goal of evaluating the relation between emotional intelligence and group cohesion and satisfaction. A questionnaire measured emotional intelligence on the Italian version of the Emotional Intelligence Assessment (SEI, Fariselli et al., 1997) and cohesion on the Group Environment Questionnaire (GEQ; Carron, Widmayer, & Brawley, 1985). In addition, another two instruments, part of the test battery "Ass3D" by Zammuner and Kafetsios (2004), examined emotion regulation and individuals' ability of facial emotion recognition. Lastly, the degree of satisfaction of group participants was measured, testing the hypothesis of a relation between emotional intelligence and members' satisfaction. The participants were 89 persons (57F; mean age 54.5, range 21-85) divided over 10 mutual-aid support groups in different areas (family problems, bereavement elaboration, dependencies, mental health, disability). Results highlight a relation between emotional intelligence and group cohesion; in other words, emotional intelligence can be a good predictor of cohesion. In particular, the factor identified through the factor analysis as the one related with "poor perception of self and of own affective world" is the main predictor. The hypothesis about the existence of a relation between members' perceived satisfaction and group cohesion is also confirmed: the most predictive factor is the one corresponding to task-related group integration. An increased level of satisfaction seems to be related to the degree of individual perception with regard to the extent to which the group taken as a whole is united, similar and solid in carrying out the task and achieving the shared goals.

# 22. SHAME ON HIM: THE IMPACT OF OTHERS' APPRAISALS ON THE PERCEPTION OF SOCIAL EMOTIONS

#### Mumenthaler, C., Brosch, T., Sander, D. & Manstead, A.

Evaluations made by other persons may play a major role in the dynamic appraisal process influencing our own judgements and evaluations. This process, known as social appraisal, should have stronger impact in ambiguous social situations where an individual could be more receptive to the appraisal of others. The purpose of this study was to investigate the influence of social appraisal on the perception of complex social emotions. We asked participants to judge blends of facial expressions of shame and sadness, or of anger and disgust, in a target face presented at the center of a screen while a contextual face expressed an emotion (disgust, contempt, sadness) or not (neutral). The dynamic of the facial expressions and the head/gaze movements were manipulated in order to create a social interaction in which both avatars shared a gaze contact only when the contextual face looked at the target face (social appraisal condition). Providing evidence for a social appraisal effect, expression blends of shame and sadness were perceived as expressing shame when a contextual face expressed disgust and looked at the target face but not when it looked away. Interestingly, this effect was specific for an expression of disgust and was not observed for contempt. In contrast, expression blends of shame and sadness were perceived as expressing more sadness when the contextual face expressed sadness and looked at the target face.

# 23. EFFECT OF SUBLIMINAL AFFECTIVE PRIMING ON FACIAL REACTIONS: ANOTHER **EVIDENCE FOR APPRAISAL THEORY**

### Philip, L., Martin, J. & Clavel, C.

Rapid facial reactions (RFRs) evoked by facial emotional stimuli are usually explained by the motor mimicry model (the tendency to automatically mimic and synchronize facial expressions with those of another person). This model defines RFRs as nonaffective motor responses (Cacioppo et al., 1988). However, recent studies tend to support another model called appraisal theory to explain RFRs (Moody, 2007; Grèzes, 2013). In appraisal theory, emotions are elicited from our evaluations of situation that leads to specific emotional reaction (Frijda, 1986; Lazarus, 1991). This model defines RFRs as emotional reactions, resulting from emotional and cognitive processes (nonconscious evaluation of stimulus and context of perception). We present an experimental study that investigates the impact of emotional priming on RFRs. We used a subliminal affective priming task to unconsciously manipulate the emotional context. Participants were observing human facial expressions (KDEF database, Lundqvist et al. 1998) of joy, fear, anger, sadness and neutral faces. Each facial expression was preceded by a parafoveal subliminal (90ms) word: JOY, FEAR, ANGER, SADNESS, and NEUTRAL. The subliminal word and facial expression were presented in congruent and incongruent conditions. Four muscles (frontalis, corrugator, zygomaticus and depressor) were recorded by facial electromyography (EMG). Results suggest that in the incongruent condition, the activation of the four muscles is less intense than in the congruent condition and the control condition (no-priming). For example, the corrugator was less activated when the subject observed an angry face either preceded by JOY, SADNESS or FEAR than when it was preceded by ANGER or no-priming. These results are consistent with others studies which indicate that RFRs can be modulated by subliminal priming (Seibt et al. 2013). Our data suggest that RFRs are modulated by emotional and cognitive processes induced by different emotional priming. These results are in line with an appraisal view of RFRs considered as emotional reactions, not only motor responses.

Cacioppo, J. T., Martzke, J. S., Petty, R. E., & Tassinary, L. G. (1988). Specific forms of facial EMG response index emotions during an interview: From Darwin to the continuous flow hypothesis of affect-laden information processing. Journal of Personality and Social Psychology, 54, 592-604.

Frijda, N.H. (1986). The emotions. Cambridge, UK: Cambridge University Press.

Grèzes, J., Philip, L., Chadwick, M., Dezecache, G., Soussignan, R., and Conty, L., (2013) Self-relevance appraisal influences facial reactions to emotional body expressions. PLoS ONE, 8(2), e55885.

Lazarus, R.S. (1991). Emotion and adaptation. Oxford, UK: Oxford University Press.

Lundqvist, D., Flykt, A., & Ohman, A. (1998). The Karolinska directed emotional faces [Database of standardized facial images]. Psychology Section, Department of Clinical Neuroscience, Karolinska Hospital, S-171 76 Stockholm, Sweden.

Moody, E. J., McIntosh, D. N., Mann, L. J., & Weisser, K. R. (2007). More than mere mimicry? The influence of emotion on rapid facial reactions to faces. Emotion, 7, 447-457.

Seibt, B., Weyers, P., Likowski, K. U., Pauli, P., Mühlberger, A., & Hess, U. (2013). Subliminal Interdependence Priming Modulates Congruent and Incongruent Facial Reactions to Emotional Displays. Social Cognition: Vol. 31, No. 5, pp. 613-631.

# 24. MUSICAL INFLUENCE ON THE VERBAL RECALL OF EMOTIONAL **AUTOBIOGRAPHICAL MEMORIES**

### Poncin, M., Weisgerber, A., Balon, S., Rimé, B. & Vermeulen, N.

Nowadays, the idea of musical influence on the recall of memories seems to be widely accepted. For instance, many theories about musical induction suggest that music is a very powerful cue in bringing emotional memories back. Accordingly, the present study aimed at investigating the impact of music cues on specificity of emotional autobiographical recalled (AMT) memories and on the use of the emotional language during verbal expression. Therefore, four musical backgrounds (neutral, anger, joy, sadness) were selected for helping people to recall memories. Concretely, following the formulation of each word, 60 participants were asked to recall a specific autobiographical memory, once without music (T1) and once with a congruent emotional music (T2). Memory content was analyzed by using the validated French version of the Linguistic Inquiry of Word Count (LIWC, Piolat et al., 2011). The results revealed that there was no significant musical influence on the specificity of emotional autobiographical recalled memories. However, musical backgrounds influence the use of emotional language depending on four emotional conditions. People used more words (e.g., positive words) related to the discrete cued emotion words (e.g., "happy" memory) when a congruent music was discretely displayed in the background (e.g. "a little night music" by Mozart) compared to the "no music" condition. In conclusion, the present study provides additional evidence that music has a powerful impact on the recall of emotional memory and on the richness of its verbal content.

## 25. SWEET REWARD INCREASES PHYSIOLOGICAL DISCRIMINATION OF SIMILAR **ODORS**

#### Pool, E., Delplanque, S., Jenkins, T. & Sander, D.

Organisms acquire a better perceptual representation of stimuli associated with emotions to rapidly identify relevant situations. This phenomenon has consistently been demonstrated for stimuli associated with negative emotional events. Here we investigated whether the same process occurs for stimuli associated with positive and rewarding emotional events. We used an appetitive Pavlovian conditioning paradigm during which one of two perceptually non-distinguishable odors was associated with a rewarding taste (i.e., a piece of chocolate). We investigated whether appetitive conditioning could improve the recognition and the autonomic responses associated with the conditioned odor, rendering it discriminable from the non-conditioned odor. Results revealed a dissociation between behavior and autonomic reactions. Participants were still not able to discriminate between two similar odors after the conditioning but their autonomic responses were different as a function of the conditioning status of the odor. More particularly, participants inhaled more and had higher skin conductance in response to the conditioned odor compared to the non-conditioned but similar odor. Our findings demonstrated that positive emotional learning can improve the perceptual representation of odors, by eliciting different physiological responses to odors that would otherwise be indistinguishable.

## 26. IS WHAT I'M FEELING GENUINE? FICTION VERSUS REALITY.

#### Sennwald, V., Cova, F., Garcia, A., Deonna, J., Sander, D.

Philosophers have long been debating about the paradox of fiction, which raises issues with our emotional reactions to fictional events: how is it possible that we are moved by the fate of fictional characters while we are perfectly aware that they aren't real? Some philosophers have argued that our affective reactions to fictions fail to be genuine emotions and are rather better considered as quasi-emotions, meaning they are phenomenologically different from affective reactions to real events. Here we experimentally investigated whether emotional reactions to fictions are only quasi-emotions. More precisely, we examined whether fictional and real videos are experienced differently in terms of emotional intensity. We measured subjective emotional experience using questionnaires and physiological activity using electrocardiography, electromyography and skin conductance sensors. All participants were presented the same video clips, however, some of them were presented as fictional and others as real – the context of the items was randomly attributed. Results showed that participants reported feeling significantly sadder when the video clips were presented as real compared to fictional. The video clips presented as real also elicited significantly less skin conductance responses than the videos presented as fictional. Our findings support the idea that emotional reactions to fictions might be quasi-emotions as they demonstrated that fiction was experienced as less emotionally intense than reality.

## 27. CHANGE AND STATUS QUO IN DECISIONS WITH DEFAULTS: THE EFFECT OF INCIDENTAL EMOTIONS DEPENDS ON THE TYPE OF DEFAULT

#### Shevchenko, Y.

Affective states can change how people react to measures aimed at influencing their decisions such as providing a default option. Here, we aim to differentiate between two prominent theories that can explain how mood states affect decisions involving defaults: The "affect-as-information" theory and the "mood-maintenance" theory. If choice of the default option maintains the status quo, both theories predict that decision makers in a positive mood are more likely to choose the default than are those in a negative mood. However, if choosing the default results in a change of the status quo, "mood-maintenance" predicts that decision makers in a positive mood will rely less on the default, whereas "affect-as-information" predicts that decision makers in a positive mood will rely more on the default. To test these predictions, we investigated in an online study how happiness and sadness influenced reliance on both types of defaults. Our results suggest that the effect of emotions depends on the type of default: in line with mood-maintenance theory, people in a happy mood were less likely than people in a sad mood to follow a default when it introduced change. The results have implications for the design of default policies in marketing.

### 28. PRECOCIOUS EMOTIONAL TROUBLE IN ALZHEIMER'S DIDEASE

#### Snoussi, M. & Charvin, H.

Alzheimer's disease is essentially characterized by mnesic, phasic and praxical dysfunctions. Emotional dysfunction is classified as psycho-behavioral secondary symptoms. For our part, theses troubles should be included in precocious AD's evaluation. In fact, we pose the idea that emotion trouble in AD is difficult to be identified because composed of a double dysfunction: a loss in emotion regulation and a loss in cognition regulation. The hypothesis was tested by different cognitive-emotional measures (Snoussi et al., in press), including evaluation of emotional sensitivity. In this objective, our team constructed a new visual computerized test: the Multiple Emotional Sensitivity Scale (Charvin et al, in preparation). Partially elaborated around the concept of emotional intelligence of Mayer, Salovey and Caruso (1999), the MESS evaluates the degree of emotional sensitivity (from 0 to 100) in perception, understanding and regulated expression in front of daily life emotional images. In the present study, we hypothesized that precocious AD's patients partially lost emotional sensitivity compared to healthy control groups, in relation to loss of somatic marking of information (Damasio, 1984). The MESS was purposed to 28 AD's patients (MMSE= 21-26), 28 old (MMSE>27) and 28 young adults (MMSE>27). The three groups were matched on social educative level, gender and age (AD/old adults). They conjointly sit the HAD (anxiety-depression measure). The results revealed that AD patients present normal score of sensitivity in perception and understanding of emotion, except for neutral images for which they show an abnormal sensitivity. In fact they seem to process image analysis in cold cognition, solely analyzing the cognitive context. A lower level of variation coefficient, compared to control groups, and a higher score for neutral image sign this abnormal processing. These results stand the idea of precocious emotional trouble in AD.

# 29. EMOTIONAL MEANING IN CONTEXT IN RELATION TO SCHIZOTYPICAL TRAITS: **AN ERP STUDY**

#### Terrien, S., Iakimova, G., Pomietto-Mazzola, P., Baltazart, V., Kaladjian, A. & Besche-Richard, C.

Background: Schizophrenic patients are impaired in their ability to process social situations that implicate emotional processing in reference to affect recognition, affective and cognitive theory of mind and empathy (Bora et al., 2009). Recent studies using the method of Event-Related Potentials (ERPs) showed that schizophrenic patients also exhibit impaired ability to integrate contextual information that is an important mechanism to the comprehension of emotional and social information (Baez et al., 2013). However, there are little results about the neurocognitive processes mediating the processing of emotional information during the integration of semantic and contextual social information as cognitive markers of vulnerability of schizophrenia.

Objectives: The goal of this ongoing study is to explore the semantic-emotional integrative processes in relation with the level of schizotypy and the self-report abilities of theory of mind in general population.

Methods: 40 healthy participants will be evaluated on schizotypy (SPQ-74) and with a self-report of cognitive and emotional theory of mind (Duval et al., 2011). The ERPs will be recorded during a linguistic task which will allow participants to saliently read 66 sentences-pairs which will describe short social situations. The first sentence implicitly conveys the emotional state of a person, either positive or negative. In the second sentence (congruent or incongruent with the emotional context of the first), the last word is neutral, positively or negatively valenced.

Results: We expect to observe that healthy and low schizotypical participants will exhibit both N400 and Late Positivity (LP) modulation by emotional valenced words contrary to high schizotypical participants.

Conclusions: The major discussion points will concern the components of ERP associated with semantic-emotional integrative processes and their disturbances as cognitive markers of a vulnerability to schizophrenia.

# 30. HOW SELF-RELEVANT APPRAISALS AND SELF-CRITICAL FEELINGS ELICIT EITHER SELF-DEFENSIVE OR SELF-IMPROVE MOTIVATIONS WHEN **COMMUNICATING UNPLEASANT INFORMATION**

### Torp Løkkeberg, S., Gausel, N. & Giner-Sorolla, R.

A growing body of research finds that communicating unpleasant information is proved to be very stressful, and one of the most challenging communication tasks for the health care professionals (Billson & Tyrrell, 2003; L. a. J. Fallowfield, V, 2004; Finset, 2012; Greening, 2008; Ungar, Alperin, Amiel, Beharier, & Reis, 2002). We also know that just presenting negative information to others makes people much more reluctant in providing such information than if they deal with positive information (Tesser & Rosen, 1972). However, little attention has been paid to investigate how people's subjective appraisals and feelings towards communicating unpleasant information (e.g seminar presentation, serious illness), can help us explain how they are motivated to respond. When people fail to live up to their moral standards, rules and aims (e.g withold information or lie about the truth) then it is not unlikely this may trigger self-critical emotions (i.e., felt shame, felt inferiority, felt rejection).

In both studies we aimed at manipulating appraisals (related to: self-image and social- image) in order to evoke specific appraisals related to communication. This is based upon the broad evidence from the appraisal literature on how to understand emotion experiences. We used the model of shame study 1 (N=171) and study 2 (N=192) to examine which appraisals, feelings and responses best predict the phenomena that occurred when introducing unpleasant information to a fellow student (Gausel & Leach, 2011).

We found that withholding information as indications of a specific self-defect in the self (i.e; hurting one's selfimage). The failure to communicate unpleasant information (i.e; withholding information) give reason to worry that other people and the friend will condemn one if they get to find out about it. Hence, it also affect's one's socialimage. We also found that providing information in a cold/professional way to be the most severe. And that it will likely hurt more if communicated like this. Then, in line with this, we found that it is less likely to appraise oneself as defective regardless of how the information is communicated. However, socially, the way it is communicated can be problematic. In line with this, the participants inform us that they would have appraised this as indications that others will condemn them for it (including their friend). Specific defect (i.e; self-image) and shame ( $\alpha$ =.94) is highest in correlation along with inferiority ( $\alpha$ =.76) and guilt ( $\alpha$ =.84). Rejection ( $\alpha$ =.88) is the least correlated. On the other appraisals it seems to be more or less equally distributed. However, one can see that it is only for feelings of inferiority and rejection (plus guilt) that general avoidance becomes significant.

## 31. EMOTION-SPECIFIC LOAD DISRUPTS CONCOMITANT AFFECTIVE PROCESSING

### Vermeulen, N., Niedenthal, P., Pleyers, G., Bayot, M. & Corneille, O.

Neuroimaging literature emphasizes that separate brain circuitry are involved when participants performed emotional compared to non-emotional working memory (WM) tasks. In the present study, we examine this question at a behavioural level. We predicted that the conceptual processing of affect would be disrupted more by concurrent affective than non-affective load. Participants performed a conceptual task in which they verified affective versus sensory properties of concepts, and a concurrent working memory (n-back) task in which the target stimuli were facial expressions. Results revealed that storing and updating affective (as compared with identity) features of facial expressions altered performance more for affective than sensory properties of concepts. The findings are discussed as supportive of the ideas that affective resources indeed exist and that these resources are specifically used during the processing and representation of affective properties of emotional stimuli.

### 32. THE INFLUENCE OF MUSIC ON THE PROCESSING OF EMOTIONAL FACES

Weisgerber, A., Gilson, T. & Vermeulen, N.

In our daily lives, emotions, which are mostly cross-modal, have a crucial impact. We are often influenced by music either voluntarily (e.g., MP3 player, concerts) or not (e.g., musical background in shopping centres, neighbour's party). Although, several studies investigated the cross-modal facilitation effect, only a few of them used music as auditory input on cross-modal affective priming. In the present experiment, we used an affective priming paradigm, i.e. different affective music samples were presented as primes (happy, sad and angry music) followed by affective faces presented as targets. Additionally, these short musical primes were presented in three different musical styles (classical, karaoke and original pop song). We observed a cross-modal facilitation effect, i.e. a more accurate evaluation when the musical primes and the to-be-evaluated targets shared the same emotional content (congruency). Concretely, angry faces have been identified more accurately and faster when preceded by angry music primes (congruency effect). The same results can be reported for joy and sad face identification. Besides, we observed that classical and original pop song primes helped better to identify accurately emotional faces than karaoke primes. This observation is a possible consequence of the absence of a main melodic line in the karaoke version. In conclusion, these observations ascribe an important role to music for the competence of identifying emotions. Furthermore, this study showed that different musical styles share the same emotional features and have similar effects on the treatment of emotional targets.

## **33. COLLECTIVE EMOTIONAL GATHERINGS, SHARED EMOTIONAL STATES AND COMMITMENT TO A GROUP AND WELL-BEING**

#### Wlodarczyk, A., Zumeta, L., Basabe, N. & Páez, D.

Collective emotional gatherings and celebrations represent major features of social life. Collective processes are functional because they favor social integration and strengthen positive shared beliefs, thus leading to enhancement of self-esteem and positive affect among participants, trough processes of emotional activation, emotional communion and fusion of identity. A longitudinal field study examined the role of individual and shared emotional states in explaining beneficial effects of positively-valanced collective gathering (symbolic drum festival, Basque Country/Spain) for individual's positive functioning and commitment to a group. Participants (317 integrants of traditional drum companies) completed measures of self-assessed well-being, group identity, perceived social support, and social beliefs at three time points. The first was a week before the gathering commenced, the second during the day of the celebration (assessing emotional states and emotional communion and fusion of identity) and the third a week after it finished. The results confirmed that emotional communion and fusion of identity mediated the relationship between satisfaction, importance and the evaluation of the experience of participation in this collective event as shared and increased well-being (controlled for the baseline). Similarly, emotions like amusement, gratitude, serenity, awe and emotional communion mediated the increase in participants' well-being, the feeling of transcendence, perceived similarity, social support, social integration and a consolidation of social beliefs/ belief in benevolence of others. Finally, the increase in group identity was mediated by flow and pride of being part of the celebration during the event. Taking into consideration its longitudinal design, the study adds robust evidence to the social psychological literature concerning positive emotional experience, showing that collective rituals elicit emotional states which contribute to personal well-being and group integration.
### 27.03.2014, 14:30-16:30

Paper Session 2.1: Self Regulation

# THE SUPPRESSION OF POSITIVE EMOTIONS AND ITS SOCIAL BENEFITS IN **OUTPERFORMANCE SITUATIONS**

Astahova, M., Martiny, S. & Goetz, T.

Previous research implies that the expression of positive emotions in social interactions has social benefits, while suppressing such emotions may entail social costs. However, prior research also has suggested that individuals might fear that expressing positive emotions will lead to negative social responses in outperformance situations (e.g., in situations in which they experience success while other individuals experience failure). In the present work, we predict that in these specific situations, individuals will suppress their positive emotions and that this suppression will be socially rewarded. We tested these hypotheses in a series of three experimental studies with high school students. In the first study (N = 33), using a within-participants design, we showed that participants suppressed positive emotions after success more when they were in a social situation in which outperformed others were present (in the presence of classmates) in comparison to a social situation in which outperformed others were not present (in the presence of parents). In a second study (N = 57), we asked participants to recall a situation of personal success in which others were present who either had also experienced a success or had experienced a failure. Results confirmed that participants suppressed positive emotions in the situation with outperformed others more than in the situation with equally performing others. In a final study (N = 195), we investigated the social consequences of suppressing positive emotions. In a video scenario, we manipulated other individuals' performance outcomes (success vs. failure) and the target person's expression of positive emotions after success (happiness suppressed vs. happiness not suppressed). Results showed that participants liked and accepted the target person more when this person suppressed positive emotions in comparison to when the target's emotions were not suppressed, but only in the presence of outperformed others.

## UNDERSTANDING AFFECT REGULATION IN DYADS THROUGH A COMPUTATIONAL MODEL OF AFFECT REGULATION DYNAMICS.

### Cameron, D., Totterdell, P. & Niven, K.

In recent years it has become increasingly evident for the need to examine affect regulation in terms of its processes or dynamics. This is particularly apparent in the complex affective dynamics and emotion cycles seen unfolding in active dyadic or group interactions. This computational model of affect regulation, based on the control theory framework, offers mechanisms for affect regulation and regulatory fatigue within individuals. In the model, affect and expressions are regulated towards held affective goals and in doing so draw from a limited regulatory resource. The current work connects multiple models to present a dynamic perspective on how intrapersonal affect regulation can have interpersonal consequences for affect. The dynamics of individuals' affective states and affective goals are demonstrated in simulations to be influenced by the concurrent states of others along known processes of affective evaluation and affect contagion. This paper presents a series of simulations of affective communication in a dyad and offer predictions of changes in affect, resource depletion, and affect goals in both agents. These simulations include: agents engaging in affect regulation towards congruent goals, agents in conflict regulating towards opposing goals, and simulations of apparent contagion of affect and even symptoms of affective disorders. As previously seen in isolated models of affect regulation in individuals, conflict between affect goals promotes greater variation in affect, regulatory fatigue and adjustment of affect goals. This occurs at the level of the individual and at the higher level of the dyad, particularly if goals across individuals are in conflict. The development of dynamic agents and these simulations offer new means of understanding the complexities of affect dynamics, both within individuals and dyads.

# EMOTION REGULATION THROUGH ATTENTIONAL AVOIDANCE OF MOOD-CONGRUENT INFORMATION IN OLDER ADULTS.

## Demeyer, I. & De Raedt, R.

Objectives. Growing evidence points towards differences in attentional processing of emotional information in older adults compared to younger adults. However, up to date, findings on attentional processing in older adults are inconclusive and research identifying inter-individual differences that explain these inconsistencies is necessary. In two studies, we examined whether mood confounds attentional processing in healthy older adults. In the first study, we investigated whether mood and symptoms of depression/anxiety are related to attentional bias. In the second study, we used a relaxation manipulation to investigate the influence of emotional state on attentional bias.

Methods. In the first study, 37 older adults completed questionnaires to assess mood, depression and anxiety. Moreover, they performed a modified exogenous cueing paradigm which measured maintained attention versus attentional avoidance of emotional information. In this paradigm, the location of a target was correctly or incorrectly cued by happy, sad or neutral facial pictures. The second study used the same paradigm. However, 37 older adults first received a mood manipulation in which they were randomly assigned to relaxation (to eliminate negative mood) or a control condition. Affective state was assessed before and after the manipulation.

Results. In the first study, older adults who scored higher on anxiety demonstrated more attentional avoidance of negative stimuli. In the second study, both groups showed decreased negative affect, which might explain the lack of group differences in attentional processing. However, over the whole group, positive affect after the manipulation was associated with more attentional avoidance of positive information.

Conclusions. These findings suggest that mood can play a role in older adults' information processing and that healthy older adults display attentional avoidance of mood-congruent information. During negative mood, avoiding negative information may serve as an emotion regulation strategy. In contrast, positive mood may lead to increased exploration after encountering mood-congruent positive information.

# ARE APPROACH-AVOIDANCE OF THE RELEVANT CUES EMOTIONAL USER **EXPERIENCE? CASE STUDIES WITH INNOVATIVE PRODUCTS**

## Dupré, D., Dubois, M., Tcherkassof, A. & Pizelle, P.

Understanding the Emotional User eXperience (EUX) is a recent challenge for industries to conceive usercentered-designs of really new products (Rindova & Petkova, 2007). Classic emotional assessment methods are now used to evaluate user's feeling following the use of these products and to shape better experiences. Emotions felt in user experience are most of the time subtle and mixed in valence and arousal (Fokkinga, Desmet, & Hoonhout, 2010). For this reason, categorical and dimensional tools are not fitted to evaluate the EUX but action readiness assessment could be a convenient alternative. Action readiness refers to the motivational component of emotions (Frijda, 1986, 2007) and reflects the interaction quality between a user and the product. Thus our hypothesis is that action readiness and especially approach-avoidance readiness are relevant clues to evaluate the EUX of newfangled products.

Two experiments allow us to show that approach-avoidance readiness indicates user's emotional feelings. In the first experiment, participants (N=53) used a traditional terrestrial globe or tactile prototype (Dupré, Dubois, Tcherkassof & Pizelle, 2012). In the second experiment, participants (N=60) used to different apps with a prototype of gestural human-computer interaction (Dupré, Dubois, Tcherkassof & Pizelle, in prep.). In each experiment, participants indicated their feelings with categorical, dimensional and approach-avoidance scales.

Results show that the approach-avoidance action readiness is a relevant clue to evaluate the EUX. An explanation suggests that emotions are to difficult to self-report in product-use contexts whereas action readiness is easier to conceive for self-assessment due to its motivational component. This tool should be designed as a non-verbal action readiness tool for EUX assessment.

# CAN AUTOMATIC INTERPERSONAL EMOTION REGULATION BE INSTIGATED VIA THE USE OF THE SCRAMBLED SENTENCE TASK?

## Hernandez Ibar, D.

OBJECTIVES: The present research investigates Automatic Interpersonal Emotion Regulation (AIER) or the way in which people influence the emotions of someone else without awareness of how and/or what they are doing. Most research on Automatic Emotion Regulation (AER) has focused on intrapersonal rather than on interpersonal AER. Expanding our knowledge of AIER could provide a better understanding of automatic regulation over other's emotions and, more broadly, interpersonal relationships.

METHODS: Two experiments examined whether it was possible to prime IER using the Scrambled Sentence Task (SST). In Experiment 1, participants were randomly allocated to complete an SST that contained words related to worsening the emotions of someone else (e.g., mock) or neutral words. Subsequently, participants wrote a script for a play between two characters in which they played the part of one. They also choose between two goals - to make the other character feel better or worse.

RESULTS: Coding of the content of the scripts showed that participants in the experimental group were more likely than participants in the control group to (i) choose the goal of making the other character feel worse and (ii) describe behaviours aimed at worsening the other character's emotions. Experiment 2 followed the same procedure but participants were not asked to choose a goal for one of the characters in the script. The results did not replicate the findings of Experiment 1; there were no differences in the use of IER strategies between the scripts of participants in the experimental or control conditions.

CONCLUSIONS: Taken together, these findings provide preliminary evidence that it is possible to prime IER, but that the effects might be moderated by the identification of an opportunity for IER (e.g., offering participants the explicit goal of IER). Priming may not influence AIER behaviours in the absence of this explicit goal.

# LOOKING INTO THE CRYSTAL BALL OF OUR EMOTIONAL LIVES: EMOTION **REGULATION AND THE OVERESTIMATION OF FUTURE GUILT AND SHAME.**

## Van Dijk, W., Van Dillen, L., Rotteveel, M. & Seip, E.

When people make decisions they often attempt to predict how these decisions will make them feel and base – at least in part – their actions on these forecasts. Ample research has shown, however, that people often overestimate the intensity of their future emotions – an intensity bias that has been demonstrated in a wide variety of populations and contexts. One major source of this bias that has been proposed in the literature is that people – when predicting their emotions – fail to anticipate how emotion regulation will affect their emotions. In the present study we aimed to provide empirical support for this hypothesis in the context of the emotions shame and guilt and different emotion regulation processes (reappraisal, suppression, acceptance, rumination). Participants were either confronted with a shame- and guilt-eliciting situation (experiencers) or were asked to read an elaborate description of it (forecasters). Subsequently, they were asked to report their (experienced or forecasted) shame and guilt and their (employed or forecasted) emotion regulation. Results showed that: (a) forecasters predicted to experience more guilt and shame than experiencers actually experienced; (b) forecasters predicted to employ less downregulating emotion regulation (i.e., less reappraisal and less acceptance) and more up-regulating emotion regulation (i.e., rumination) than experiencers actually employed; (c) Thirdly, the difference between the intensity of forecasted and experienced shame and guilt (i.e., the intensity bias) could be explained (i.e., was mediated) by the difference between forecasted and actually employed emotion regulation. These findings provide compelling support for the hypothesis that a major source of the intensity bias is that people fail to anticipate that they readily regulate an emotion-eliciting event and that this regulation attenuates the emotions they experience.

## 27.03.2014, 14:30-16:30

## Symposium 2.1

## ATTACHMENT INSECURITY AND SOCIAL EMOTION PERCEPTION

### Vrtička, P., Kafetsios, K., Westphal, M. & Andriopoulos, P.

One of attachment theory's central propositions is that insecure attachment strategies and defenses regulate processing of emotional messages and block awareness of feelings and intentions in self and others. In the last fifteen years, research has generated evidence in support of these expectations, especially with regard to how insecure attachment orientations (avoidance and anxiety) affect the processing of attachment and related emotional information (see Dykas & Cassidy, 2011). However, less is known about insecure attachment differences in the perception of facial emotions and the tendency to attend to and accurately decode others' emotional expressions. Despite the central role of emotion perception in social interactions, there is relatively little research on attachment and emotion perception in relation to social aspects and functions of emotion perception. Facial emotional expressions have developed to communicate information that allow perceivers to infer targets' state of mind and such communications are crucial for the functioning of the attachment system in a social environment (Lavelli & Fogel, 2005).

Inspired by recent data that highlight social processes involved in insecure attachment and emotion perception (Vrtička, Sander, & Vuilleumier, 2012), this symposium brings together research that explores links between insecure attachment orientations and different facets of social emotion perception. The first paper (Vrtička, Debbane, Sander, Vuilleumier, & Reiss) sets the ground for the symposium's thesis by reviewing recent findings from behavioral and neuroimaging studies that speak for differential links between insecure attachment orientations and social and non social emotion perception in adults and adolescents. The second paper (Kafetsios, Andriopoulos, & Papachiou) presents evidence from studies that point to the interpersonal context as a potent moderator of insecure-avoidant motivated social cognitions toward positive facial emotion expressions. In their contribution, Westphal, Bonanno, and Mancini will discuss data suggesting that anxious attachment influences attentional biases for facial expressions of disgust implicated in social and individual processes. Finally, Andriopoulo's presentation will discuss evidence that approach and avoidance motivation are potent moderators of avoidant and anxious attachment differences in emotion perception.

Overall, the research to be presented in this symposium aims to pave new ground in the relation between adult attachment and emotion perception by exploring insecure attachment orientations' more controlled perception processes and links with various social determinants of emotion perception: social and non-social emotion stimuli, the interpersonal context of emotion perception, the social functionality of emotion expressions, and the social motivations to attend and decode positive and negative emotion expressions. The symposium is in keeping with growing interest in social facets of emotion perception and brings to the fore considerations for interventions. Attachment insecurity is prevalent across different populations, is thought to show moderate stability over the life span, tends to be transmitted across generations, and represents a risk factor for dysfunctional behavior (e.g., social anxiety, borderline personality disorder, etc.). Attachment insecurity can create a vicious circle of negative social influence that shapes one's social environment, increasing risk for social isolation and undermining the protective effects of social support. Examining the role of insecure attachment differences in social emotion perception therefore may advance knowledge of an important part of the interpersonal processes driving negative social effects.

# THE INFLUENCE OF ATTACHMENT INSECURITY ON BRAIN ACTIVITY DURING SOCIAL EMOTION PERCEPTION

## Vrtička, P., Debbane, M., Sander, D., Vuilleumier, P. & Reiss, A.

Emotion perception plays an important role during social interactions. It helps us determining how our interaction partner may be feeling, and provides us with information on how to adjust our own behavior to the situation. During the last six years, I have collected growing evidence that attachment insecurity (avoidance and anxiety) can importantly alter emotion perception, specifically within social contexts.

In healthy young adults, I measured subjective behavioral ratings to positive and negative social or nonsocial complex images. I also assessed brain responses to happy versus angry static, as well as artificial 3D dynamic positive (joy and wonderment) versus negative (anxiety and fear) emotional facial expressions. Results from these studies converge in indicating specifically altered behavioral and brain activation patterns as a function of attachment avoidance and anxiety. Whereas attachment avoidance appears to decrease behavioral and neural responses particularly to positive social information, attachment anxiety seems to increase such responses particularly to negative social information.

More recently, in adolescents aged 12-19, I examined brain responses to static emotional facial expressions either congruent or incongruent with participants' goals and intentions. My data indicate a prominent influence of attachment avoidance by shifting brain activity away from incongruent towards congruent social information. Because adolescence is an important period for social learning and skill acquisition, particularly through social conflict resolution, these results suggest that attachment avoidance may interfere with normal social development during this age period.

Altogether, my findings indicate that the social environment within which a person grows up in – reflected by his/her attachment style – keeps moderating behavioral and brain responses during social emotion perception in both adolescence and adulthood. Such patterns could serve as markers for the detection of risk factors for psychopathology associated with attachment insecurity, and inform the development of new prevention and intervention strategies.

# **RELATIONSHIP STATUS MODERATES AVOIDANT ATTACHMENT DIFFERENCES IN** POSITIVE EMOTION DECODING ACCURACY

## Kafetsios, K., Panoraia, A. & Papachiou, A.

We investigated attachment differences in the perception of facial emotion expressions. Participants completed a dimensional assessment of adult attachment and recognition accuracy tasks for positive and negative facial emotion expressions. Consistently, in three studies, avoidant participants who were in romantic relationships, in comparison to singles, had lower decoding accuracy for facial expressions of positive emotions. The results were in line with the hypothesis that being in relationship functions as a naturalistic prime of avoidant persons' defensive tendency to ignore affiliative signals, facial expressions of positive emotion in this instance. The results inform emerging research on attachment and emotion perception by highlighting the role of perceivers' motivated social cognitions.

### ATTACHMENT AND ATTENTIONAL BIASES FOR FACIAL EXPRESSIONS OF DISGUST

Westphal, M., Bonanno, G. & Mancini, A.

Research on biological and psychological functions of disgust is increasing, yet relatively little is known about how people react to facial displays of disgust. This study used the dot probe task to examine attachment-related biases for emotional faces. Anxiously-attached individuals exhibited a significant tendency both to attend away from closed-mouth disgust faces, which have been associated with social rejection (social-moral disgust), and to attend toward open-mouth disgust faces, which are associated with visceral or core disgust. Consistent with theoretical proposals that there are two distinct sub-types of disgust, we propose that attentional avoidance of closed mouth disgust faces represents an emotion-regulatory response to perceived social threat among individuals high in attachment anxiety. Future research examining attentional biases to disgust in clinical populations may shed light on interpersonal functions of disgust in psychopathology.

# ADULT ATTACHMENT AND FACIAL EMOTION DECODING ACCURACY: THE MODERATING ROLE OF SOCIAL GOALS

#### Panoraia, A.

The study examined the interface of insecure attachment orientations and social goals for facial emotion perception. Participants (N = 104) completed a dimensional measure of adult attachment, the Social Goals questionnaire (approach vs. avoidance, Gable, 2006) and participated in a laboratory task of emotion perception (Ekman & Friesen, 1972) of gradients of four emotion expressions (happiness, fear, anger and sadness). Avoidant participants low in social approach goals were less accurate in the decoding of happy facial expressions. Avoidance and higher social approach goals predicted higher decoding accuracy of angry facial expressions. Participants with higher attachment anxiety and low in social approach goals were more accurate in the decoding of happy emotional expressions. Higher anxious attachment and social avoidance goals predicted lower accuracy in decoding sad facial expressions. The study points to the motivating elements of perceivers' and targets' facial expressions as moderators of insecure attachment decoding effects.

## 27.03.2014, 14:30-16:30

## Symposium 2.2

# THE GRID PARADIGM: A PRINCIPLED MULTIDISCIPLINARY APPROACH TO ASSESS THE MEANING OF EMOTION WORDS

### Scherer, K., Fontaine, J., Soriano, C. & Ogarkova, A.

The present symposium reports an extensive cross-cultural and cross-linguistic study on the meaning of emotion words adopting a novel methodological approach (Fontaine, Scherer, & Soriano, 2013). Based on the Component Process Model a new instrument was developed to assess the meaning of emotion terms. This instrument, the GRID questionnaire, consists of a grid of 24 emotion terms spanning the emotion domain and 142 emotion features that operationalize five emotion components (Appraisals, Bodily reactions, Expressions, Action tendencies, and Feelings). For the operationalization of these five emotion components very different emotion models from the Western and the cultural-comparative emotion literature have been taken into account. The symposium reports the empirical results obtained with this instrument in 34 samples representing 27 countries and 24 languages. It is demonstrated that the semantic space covered by the emotion terms can be adequately represented by a four-dimensional structure, namely by VALENCE, POWER, AROUSAL, and NOVELTY. This factor structure can be used as a point of reference to study meaning differences between cultural and linguistic groups. As the GRID instrument integrates very different emotion theories from different scientific disciplines, the instrument lends itself to multidisciplinary exchange and research.

The first contribution of this symposium, presented by Klaus Scherer, focuses on the theoretical background of the GRID project and instrument. It is suggested that the features in the meaning of all emotion words must be determined by the specific nature of emotion as a bio-psycho-social phenomenon and that, in consequence, the nature and definition of emotion need to be clarified first. A componential framework in the form of the Component Process Model of emotion (CPM) is presented. Specifically, the issue of the number of different emotions and their categorization and labelling is discussed, addressing also the underlying mechanisms. It is suggested that folk concepts of emotion are built into the semantics of the labels, reflecting a process of lexical sedimentation of emotional experience. In the GRID paradigm, word meanings are operationalized as feature profiles encompassing information pertinent to all the components of the emotion construct.

The second contribution, presented by Johnny Fontaine, focuses on the overall meaning structure emerging from the extensive GRID database. Hypotheses about the overall structure of the emotion domain as proposed by basic emotion, dimensional and componential theories are investigated. It is found that features from all emotion components contribute universally to the meaning of emotion terms; that the four dimensions of VALENCE, POWER, AROUSAL, and NOVELTY represent the emotion domain, and that the four major basic clusters of joy, sadness, fear, and anger and two smaller clusters of surprise and compassion can be identified. The presentation also assesses cultural and linguistic variation in this meaning structure.

The third contribution by Cristina Soriano presents how the GRID paradigm can be used within linguistic studies on emotions. More specifically, the GRID paradigm is compared with Conceptual Metaphor Theory, developed within cognitive linguistics. The insight provided by each method is compared on the conceptualization of anger in English and Spanish with respect to a number of affective "semantic foci" or aspects of emotion, like intensity, control, or positive/negative evaluation, frequently highlighted by metaphor in the emotional domain. The presentation provides a characterization of anger according to these foci. Then, the GRID is shown to tap on the same foci, providing results coherent with those from metaphor analysis. The semantic foci are proposed as a viable tertium comparationis for interdisciplinary communication and cross-fertilization.

In the fourth contribution, Anna Ogarkova explores the applicability of the GRID method in research on culturespecific emotion concepts. A case-study considers the Russian emotion concept 'toska', frequently reported to be among the 'key' concepts in the Russian culture, and characterized by both cultural saliency and 'untranslatability' into other languages. Two hypotheses are explored, namely, that toska is an emotional 'blend' of sadness and anxiety and that toska is primarily a sadness word in Russian. Although the results provide more robust support to the latter contention, she also shows that the GRID method aptly specifies the degree of gradual overlap of the meaning of toska with anxiety/fear terms in Russian.

Fontaine, J. R. J., Scherer, K. R., & Soriano, C. (Eds.). (2013). Components of Emotional Meaning: A Sourcebook. Oxford: OUP.

# **MEASURING THE COMPONENTIAL MEANING PROFILES OF EMOTION WORDS ACROSS LANGUAGES: A THEORY-BASED APPROACH**

### Scherer, K.R.

The presentation will describe the development of a new instrument to quantitatively measure the meaning of emotion words in a fashion that allows comparison across languages. The rationale underlying this new, empirical approach to define and assess the semantics of emotion will be briefly outlined. Specifically it is claimed that:

Emotions are tightly organized packages of synchronized multi-component response patterns driven by appraisal. These packages become available to consciousness in the form of nonverbal qualia that can be mapped into a multidimensional affective space. Some of these packages occur more frequently than others, given the pervasiveness of situations producing frustration, loss, achievement, etc., resulting in modal emotions. Most linguistic communities have given discrete labels to such modal emotions, which, due to the human condition, are largely universal (although there may be specific emotions reflecting particular interpersonal relations in some societies) - a phenomenon referred to as lexical sedimentation. Given the modal response marking function of such lexical expressions, it can be expected that the semantics of the respective terms reflect the synchronized patterns of appraisal and response configurations in the underlying package. Feature profiles measuring the quality of the respective patterns can be used to empirically measure the meaning of specific nouns or other lexical units and to determine the differentiation as well as the similarity relationships between different terms and their translational equivalents across different languages.

Based on these assumptions, we developed a new paradigm, the GRID approach, and a corresponding instrument in which participants are requested to indicate the probability that each of 142 component features are present if a certain emotion word is used to describe a person's emotional state. In addition to the description and justification of the instrument, pertinent research designs will be discussed and illustrated with selected data.

## EQUIVALENCE AND CULTURAL AND LINGUISTIC VARIATION IN THE MEANING OF **EMOTION WORDS**

#### Fontaine, J. & Scherer, K.R.

The GRID instrument, consisting of 24 emotion terms and 142 emotion features representing appraisals, bodily reactions, expressions, action tendencies, and feelings, has been applied in 34 samples from 27 countries in 24 languages (Fontaine, Scherer, & Soriano, 2013). Cultural and linguistic stability and variation in meaning are investigated using Simultaneous Component Analyses (SCA), Clusterwise SCA, and bias and equivalence analyses. Across all samples a stable four-dimensional structure emerged, defined by VALENCE, POWER, AROUSAL, and NOVELTY in that order of importance. A common structure across all 34 samples accounted for 67% of the total variance (compared to 77% for sample-specific structures). Further analyses revealed that the variation is entirely due to individual emotion features shifting in meaning in the common structure, especially on the valence dimension. For instance, the feature "feeling submissive" varied from being highly negatively to highly positively valenced. The average distances between the 24 emotion terms in the common structure accounted for 78% up to 91% of the sample-specific positions of the emotion terms. Most meaning variation was observed on the arousal dimension, especially for the terms "contentment" and "despair". They could refer different degrees of arousal, from very low to very high. Features from all emotion components contributed to the overall structure. The 142 GRID features allowed to correctly classify over 80% of the 24 emotions across the 34 samples. The results demonstrate how the identification of universal properties in the semantic structure of emotion terms can be used as empirical points of reference to identify (possibly large) variation in meaning.

## CONCEPTUAL METAPHORS AND THE GRID PARADIGM. A CASE STUDY ON 'ANGER' IN ENGLISH AND SPANISH

#### Soriano, C.

The GRID paradigm presented in this symposium is useful in linguistic research in four important ways: (1) for the accurate characterization of emotion concepts, (2) for the comparison of emotion terms within and across languages, (3) for the exploration of the language-culture interface, and (4) for the triangulation of results across linguistic methodologies. Examples will be provided for all these applications, but the latter will be illustrated in more detail with a case study on the conceptualization of anger in English and Spanish using the GRID paradigm and Conceptual Metaphor Theory. The GRID paradigm, emerging from emotion psychology, studies the meaning of emotion words using speakers' ratings of semantic features. Conceptual Metaphor Theory, developed within cognitive linguistics, investigates regularities in the figurative expressions we use to talk about emotion in a language. The insights afforded by each approach are compared with respect to a number of affective "semantic foci" (like intensity, control, or positive/negative evaluation), defined as aspects of emotion frequently highlighted by metaphor in the emotional domain. We first provide a characterization of anger according to these foci, as afforded by conceptual metaphor. The GRID is then shown to tap on the same foci, providing results coherent with those from metaphor analysis. Approach-specific insights are also discussed. The semantic foci are proposed as a viable tertium comparationis for interdisciplinary communication and cross-fertilization.

# WHAT THE GRID CAN REVEAL ABOUT CULTURE-SPECIFIC CONCEPTS: A CASE STUDY OF RUSSIAN TOSKA

### Ogarkova, A., Fontaine, J.R.J. & Prihod'ko, I.

This talk will explore the applicability of the GRID method in research on culture-specific emotion concepts, a domain that emphasizes cultural variability in emotion conceptualization and asserts that indigenous emotion categories play a major role in cultural socialization processes. Our case-study considers the Russian emotion concept 'toska', frequently reported to be among 'key' concepts in the Russian culture and characterized by both cultural saliency and 'untranslatability' into other languages, Western European and Slavic alike. Deriving from the controversy in lexicographers and semanticists' views about its meaning, we empirically explore two hypotheses, namely, that toska is an emotional 'blend' of sadness and anxiety (Hypothesis 1), and that toska is primarily a 'sadness' word (Hypothesis 2). On the one hand, our results provide more robust support to the second hypothesis, and do so not only in Russian, but also in seven more languages from three language groups: Germanic (English, German), Romance (French), and Slavic (Czech, Slovak, Polish, and Ukrainian). In the light of this evidence, defining toska as a 'blend' of sadness and anxiety appears to be less appropriate than defining it as a word denoting a sadness-related emotional state. However, the GRID method also shows that toska is semantically closer to 'anxiety/fear' words than the prototypical 'sadness' labels in Russian and other languages. This shift does not, however, suggest a comparably strong correlation of toska with both 'sadness' and 'anxiety/fear' emotion categories. Rather, an 'anxious' component in toska constitutes a 'potentiality' which can get actualized in specific contexts. This, in turn, explains why toska is sometimes used as a translation correlate of 'anxiety/fear' words in other languages, such as French angoisse/anxieté or English anxiety/anguish. The talk will conclude with the discussion of further applications of the GRID paradigm in future research on culture-specific emotion concepts.

27.03.2014, 14:30-16:30

Symposium 2.3

## THE POSITIVE SIDE OF SHAME

### de Hooge, I., Gausel, N., Sheikh, S. & Giner-Sorolla, R.

In this symposium, we present the latest findings from many of the leading labs involved in exploring the functional psychology of shame. This social emotion has often been characterized as dysfunctional (e.g. by Lewis, and by Tangney), especially in relation to guilt. But recently, many theoretical models (e.g. Gilbert; Teroni & Deonna) and empirical studies (e.g., Allpress & Brown; Gausel et al.; de Hooge et al.) have argued that shame does not have to always involve counterproductive withdrawal, intense negative affect, and self-loathing. Instead, it can involve a serious motivation to improve threatened aspects of the whole self, with prosocial rather than antisocial or self-destructive consequences. At the same time, because guilt focuses on repair of a specific transgression within a specific relationship (as argued originally by Baumeister, and later by Leach and colleagues), it may have limited prosocial benefits. Indeed, recent empirical studies by Nelissen, Morewedge and others have shown, for example, that guilt's prosocial tendencies do not extend to helping people other than the harmed person, can be assuaged by the prosocial acts of third parties towards the harmed individuals, and can be satisfied by acting unethically toward third parties in order to help the harmed person. An important feature of this research as a whole is its extension of ideas and empirical tests to both interpersonal and intergroup settings.

The four talks in this symposium extend research on the positive side of shame among a variety of cultural settings and with many different outcomes, both lab and field-based, introspective and observational. Intergroup as well as interpersonal settings are represented, and shame is compared to rival emotions including guilt, fear of condemnation, and anger.

In our first talk, we show how shame produces more general affiliation tendencies after a transgression than guilt does, across seven experimental studies inducing emotions by various means (de Hooge). The next talk shows how shame is involved in positive intergroup outcomes after viewing the ingroup as perpetrator, in the post-conflict situation in Liberia, while viewing the ingroup as victim creates a more defensive pattern mediated not by shame, but by fear of social condemnation (Gausel). Gathering data across a large variety of worldwide cultures, our third talk presents evidence that the much-demonstrated negative and pathological consequences of shame-proneness may be culturally bound, and specific in fact to individualistic cultures (Sheikh). Finally, Giner-Sorolla as symposium convenor will present the view that each emotion internally represents a different view of the self in others' eyes - shame modelling hierarchical standing and representing the view of the community, guilt modelling reciprocal standing and representing the view of a close friend or family member. This view can explain both positive and negative outcomes of each emotion, while accounting for the diverse findings so far regarding their differences. These theoretical views are backed up by a number of studies on social construal of dieting, and others manipulating the focus of retrospective experiences. We hope that this set of presentations will leave the viewer with no doubt that shame indeed has a positive side.

# A NEW VIEW OF SHAME AND GUILT: SHAME MOTIVATES AFFILIATION AND GUILT MOTIVATES AVOIDANCE

## de Hooge, I., Breugelmans, S., Wagemans, F. & Zeelenberg, M.

Many, if not all, emotion theories suggest that shame has negative interpersonal consequences such as avoidance, whereas guilt has positive interpersonal consequences such as affiliation. Instead, we suggest that shame motivates a need to belong and affiliation, whereas guilt motivates a need to repair a damaged relationship and avoidance. The central concern of shame is a threatened self. We suggest that this self signals the need to affiliate with other people in order to promote one's belonging to a social group. Thus, shame would activate a need to belong and affiliation. The central concern of guilt is a damaged relationship and the tendency to make amends. We suggest that guilt motivates a preoccupation with the victim, and thus only motivates interactions with the victim and not affiliation with others in general.

Seven studies tested these ideas. Studies 1a-1c revealed that only shame-proneness correlated positively with Need to Belong and Social Comparison. Studies 2-5 used different shame/guilt inductions and measured interpersonal behavior with a choice between doing a task alone (withdrawal) and doing a task together with someone else (affiliation). Study 2 induced shame and guilt with an autobiographical recall procedure, and Study 3 with a scenario. Both studies found shame to motivate affiliation and guilt to motivate withdrawal. Studies 4 and 5 tested whether shame would motivate affiliation in every situation, and guilt only with the victim. Study 4 induced shame with a lab induction. Shame motivated affiliation with both people who knew and people who did not know about the shame event. Finally, Study 5 induced guilt in the lab, and found guilt to motivate affiliation only with the victim. In sum, emotion theories might need a change: shame is not so ugly and guilt is not so good as currently assumed.

## SEEKING REVENGE OR SEEKING REPAIR: MANIPULATING PERPETRATOR OR VICTIM FOCUS DETERMINES RESPONSES IN RECIPROCAL INTERGROUP CONFLICT

### Gausel, N., Leach, C., Mazziotta, A. & Feuchte, F.

Most inter-group conflicts are treated as having a clear divide between perpetrator and victim. However, in many cases people can belong to a group that has been both perpetrator and victim. Hence, in a field-experiment in the context of a reciprocal conflict in Liberia, we investigated how focusing on one's in-group as either victim or perpetrator affected feelings (e.g., shame), and in turn how feelings led to seeking repair of the inter-group relationship (empathy, repair of relationship) versus seeking angry revenge. As expected, participants who were led to focus on their in-group as victim preferred revenge rather than repair. The desire for revenge was fully mediated by their fear of being condemned by others. In contrast, participants who were led to focus on their ingroup as perpetrator preferred repair to revenge. The desire for repair was partially mediated by their felt shame. This study, then, shows that even in a severe post-conflict setting, feelings of shame can be involved in beneficial outcomes leading to reconciliation.

## CULTURAL VARIATIONS IN THE MORAL STATUS OF SHAME

#### Sheikh, S.

We are quick to render conclusions about the moral value of specific emotions. One such case involves the comparison between two emotions central to morality, shame and guilt. Here, guilt is good, while shame is bad. Indeed, shame has been considered morally inferior to guilt by many scholars since Ruth Benedict's (1946) infamous distinction between shame and guilt cultures. I will discuss recent developments from a moral regulatory perspective (e.g., Sheikh & Janoff-Bulman, 2010) that considers shame in a new, more positive light, and will report results from two studies that find shame's destructive consequences to be malleable and culture-specific. Moreover, a large-scale review of the consequences of shame finds several behavioral tendencies associated with the emotion: (1) destructive tendencies (e.g., anger, hostility), primarily in individualist countries such as North American and Europe (2) constructive tendencies (e.g., self-improvement; prosocial behaviors) in collectivist cultures such as South and East Asia, and (3) withdrawal tendencies (e.g., shrinking, avoiding others), found across all contexts. Overall, emotions are neither good nor bad in themselves, but the type of motivation enacted determines their moral value.

## SHAME AND GUILT AS INTERNALIZED SOCIAL MODELS

#### Giner-Sorolla, R.

Emotion psychology currently grapples with at least ten distinct models purporting to identify the true difference between shame and guilt - some focusing on the act (guilt) versus person (shame) distinction, others on the external versus internal distinction, and yet others on motivational and relational peculiarities of each emotion. Exemplifying the confusion, some models (e.g. Teroni & Deonna) identify shame as responding to violation of abstract values and guilt to violation of relationships, while others (e.g., Tyler) cast the emotions exactly opposite. I think a comprehensive theoretical viewpoint that can explain all of these, with some necessary additions and modifications, can be found in the work of Paul Gilbert. He sees these emotions as adaptive social reactions to the threat of inferiority in a hierarchical system (shame) and to the threat of disruption in a reciprocal relationship (guilt). However, Gilbert's work focuses on clinical applications, whereas I see great promise in this viewpoint for explaining normal social relations.

One fruitful arena lies in exploring areas of self-development which can be construed in hierarchical terms - as a competition with others - or in reciprocal terms - as a deal between parts of the self. After some preliminary results that establish the basis of shame in concerns about hierarchy and guilt in concerns about harm to others, I will present two studies of university women dieters which measured the extent to which they see their diet in these two ways. Indeed, we find guilt to relate to reciprocal construals as well as internalized standards, and shame to relate to hierarchical construals, especially externalized ones. I will conclude by explaining how a functional perspective can explain already observed shame-guilt differences in terms of the different perspectives to be modelled: society at large (shame) versus a close other (guilt).

## 27.03.2014, 14:30-16:30

Symposium 2.4

## ADVANCES IN UNDERSTANDING DEPRESSIVE RUMINATION

### Marchetti, I., Fang, L., Kühner, C. & Koster, E.

Rumination has been described as "behaviors and thoughts that focus one's attention, on one's depressive symptoms and on the implications of these symptoms" (Nolen-Hoeksema, 1991). In recent years, rumination has received wide attention as an important transdiagnostic cognitive risk factor associated with negative affect, impaired problem-solving, and the development and maintenance of emotional disorders such as depression. In particular, rumination has been examined as a cognitive risk factor for the development and duration of depressive episodes, and there is abundant evidence showing that rumination can indeed be considered as a cognitive risk factor for depression. However, it is important to note that in recent years it is becoming increasingly clear that only specific forms of rumination are related to depression risk. Thus, there appear to be distinct forms of adaptive and maladaptive rumination.

Although there is a wealth of research on the consequences of rumination and the nature of rumination, less research has focused on the mechanisms underlying such persistent negative thinking. In this symposium rumination will be studied from an information processing view, where it is argued that difficulties in attentional control play an important role in the persistence of negative thought.

In the first presentation, Igor Marchetti will present a study on the relation between daydreaming, ruminative self focus and depressive symptoms. This study shows that daydreaming can be toxic and have negative effects through enhancing ruminative self focus. In the second presentation, Lin Fang applies dynamic systems theory to investigate the relation between affect and rumination in a sample of remitted depressed individuals and healthy controls. Such analysis allows to examine whether the organization of thinking is changed by having experienced a depressive episode. In the third presentation, Christine Kühner will present a large study examining the neural mechanisms of rumination and stress in a sample of remitted depressed individuals versus healthy controls; Finally, Ernst Koster will present a new measure to examine state rumination. The reliability and validity of this instrument has been examined in a number of studies.

Across the different presentations it will become clear how new advances in the study and analysis of rumination contribute to our understanding of its role in depressive symptoms. This symposium is of interest to basic cognition and emotion research as well as to clinical researchers aiming to understand and modify the persistence of negative thought.

# FROM DAYDREAMING TO DEPRESSIVE SYMPTOMS: A NEUROCOGNITIVE **HYPOTHESIS**

## Marchetti, I. & Koster, E.

Daydreaming is a frequent mental activity where the mind can wander freely. Recent research suggests that under certain circumstances, daydreaming is associated with adverse effects on cognition and affect. Based on a neurocognitive hypothesis about the influence of resting state brain activity in relation to rumination and depression, this questionnaire study investigated mechanisms linking daydreaming to depressive symptoms. Specifically, an indirect effect model was tested in which daydreaming influences depressive symptoms through enhancing self-focus and ruminative thought. Results were in line with the hypothesized model and several alternative pathways were ruled out. The results provide initial supportive evidence that daydreaming can influence depressive symptoms through influences on self-focus and rumination. Further research should use prospective or experimental designs to further validate and strenghten these conclusions.

# A DYNAMIC SYSTEM ANALYSIS OF THE EFFECT OF MOOD AND RUMINATION IN **REMITTED DEPRESSION**

## Fang, L., Koster, E., Marchetti, I. & Kühner, C.

Objectives: This study explored prospectively whether there exists a cognitive vulnerability to remitted depression by using a new dynamic system methodology: State Space Grid.

Methods: The present study is a secondary analysis of Huffziger et al. (2013). All the participants in the original study, including 31 remitted depressed patients and 32 healthy controls, were reassessed for the present analysis. Participants participated in an ambulatory assessment study measured five times daily for two consecutive workdays. According to the state space model, the scores on questionnaire measures of valence and momentary rumination were analyzed in a state space grid in order to examine the dynamic patterns of different individuals and groups. Dispersion, transition, average mean duration and distance were used as indicators of variability of each individual's dynamic pattern.

Results: The most common dynamic patterns of both groups were instability and most of the events in each individual's trajectory occurred in the states with high levels of valence and low levels of rumination. However, the dynamic patterns of remitted depressed patients showed a negative relationship between level of valence and momentary rumination. Furthermore, the analysis revealed a statistically significant difference in dispersion between the two groups. The dynamic trajectories of remitted depressed patients were more flexible than healthy controls.

Conclusions: These findings provide evidence that previously depressed individuals have a cognitive vulnerability even when they are in remission. The dynamic pattern of remitted depressed patients revealed a potentially increased level of rumination when they are in the low mood. The present study is an innovative effort to explore the dynamic systems in this field.

# **NEUROBIOLOGICAL CORRELATES OF DAILY-LIFE RUMINATION IN REMITTED DEPRESSED AND HEALTHY INDIVIDUALS**

Kühner, C., Zamoscik, V., Ebner-Priemer, U., Huffziger, S. & Kirsch, P.

Objectives: Aim of the present study was to combine ambulatory assessment (AA) with functional magnetic resonance imaging (fMRI) to investigate effects of momentary rumination on mood and cortisol activity during daily life and to establish neural activity correlates of daily life rumination in remitted depressed patients (RD) and healthy controls (HC).

Method: Thirty-two RD and 32 HC, matched by age, sex, and education level, participated in a combined AA/fMRI study. AA of momentary rumination, mood, and saliva cortisol was performed on two consecutive workdays with 10 palmtop-prompted assessments per day. Depressive symptoms and habitual rumination were assessed retrospectively at baseline and at a six-months follow-up survey. Participants also underwent a fMRI paradigm that induced negative mood by the recall of significant negative autobiographical life events during scanning.

Results: Higher levels of daily rumination were linked to higher levels of negative mood and predicted higher daily cortisol levels in both samples. A higher connectivity of the default mode network (DMN, seed region posterior cingulate cortex) with the bilateral parahippocampal gyri during negative mood induction was identified in RD. In RD, a higher connectivity predicted higher levels of rumination and negative mood in daily life and a worsening of depressive symptoms and habitual rumination during the following six-months period.

Conclusion: The combination of laboratory and daily life assessments can add important knowledge to possible rumination-related mechanisms that affect mental health outcomes. In our study, rumination in natural contexts affected subjective emotional experience and psychoendocrinological activity during daily life in remitted and never-depressed individuals. In RD, momentary rumination was connected to specific alterations in autobiographical processing of negative experiences that may have scar-like properties. Our future work aims to investigate whether a short mindfulness-based attention training is able to influence DMN hyperconnectivity and daily life rumination in remitted depressed patients.

## THE MOMENTARY RUMINATIVE SELF FOCUS INVENTORY: A NEW MEASURE OF STATE RUMINATION

### Koster, E., Marchetti, I. & Mor, N.

Ruminative self-focus is a common emotion regulation strategy that is considered a major risk factor for depression and a number of other emotional disorders. Although measures of trait dispositions to engage in rumination are well-validated, a state measure of ruminative self-focus is lacking. We report on the development and validation of a new self-report measure, the Momentary Ruminative Self-focus Inventory (MRSI). In five studies, we examined the psychometric properties of the MSRI. In Studies 1, 2, and 3, we report the results of exploratory and confirmatory factor analysis, demonstrating that the 6-item MRSI consists of two related factors. In Study 4 we examined the concurrent validity of the MRSI, showing that scores on the MSRI were positively but modestly related to measures of trait rumination and self-focus. Finally, in Study 5, we provide further validation of the MRSI by demonstrating its sensitivity to an experimental manipulation of ruminative self-focus. Taken together, these findings provide support for the psychometric properties of the MRSI as well as its construct and concurrent validity.

## 27.03.2014, 17:00-18:00

## Keynote II

## **PROTESTERS AS "PASSIONATE ECONOMISTS"**

### Van Zomeren, M.

To explain the psychology behind individuals' motivation to participate in collective action against collective disadvantage (e.g., demonstrations, sit-ins, petitions), I outline a theoretical model that conceptualizes collective action against collective disadvantage as the outcome of two distinct psychological processes: Emotion-focused and problem-focused approach coping. Emotion-focused approach coping revolves around the experience of group-based anger (based in the appraisal of external blame for the unfairness of collective disadvantage). Problem-focused approach coping revolves around beliefs in the group's efficacy (based in the appraisal of instrumental coping potential to change collective disadvantage). The model makes explicit the dynamic nature of collective action by explaining how undertaking collective action can also lead to the re-appraisal of collective disadvantage, thus inspiring more or less future collective action. I review the empirical support for the model and discuss its theoretical and practical implications.

### 27.03.2014, 18:00-19:00

### Poster Session II

# 1. EMOTION DIFFERENTIATION AND CLARITY OF FEELINGS: TWO DISTINCT **CONSTRUCTS**

### Arndt, C. & Lischetzke, T.

To date, the constructs of emotion differentiation (ability to differentiate between discrete emotions, e.g. anger versus sadness) and clarity of feelings (extent to which individuals are certain about their feelings) have been largely investigated in separate studies. There is only little research on the relationship between clarity of feelings and emotion differentiation, and clarity of feelings has most often been assessed by self-report but not by non-selfreport measures. Hence, our first aim was to analyze the relationship between the two constructs using a response time (RT)-based measure of clarity of feelings. The second aim was to test whether the constructs have differential relations with measures of subjective well-being. The third aim was to test the following moderator hypothesis: We assumed that emotion differentiation is positively related to well-being when individuals are clear (certain) about their feelings and negatively related to well-being when individuals are unclear (uncertain) about their feelings. We conducted an ambulatory assessment study (N = 51 students, 3 occasions per day, 7 days). Positive and negative emotion differentiation indices were computed on the basis of averaged Pearson correlations between all possible pairs of positive and negative emotion items, respectively. Clarity of feelings was measured directly via self-report and indirectly by means of RT for affect items. The results showed that emotion differentiation and clarity of feelings were largely unrelated and differentially related to life satisfaction and affect balance. Moderated regression analyses confirmed the expected interaction between emotion differentiation and the RT measure in predicting daily life satisfaction and pleasant-unpleasant mood. The results showed that emotion differentiation and clarity of feelings are distinct constructs that have differential relations to the cognitive and the affective facet of well-being. The results suggest that whether emotion differentiation is beneficial or detrimental to well-being depends on other individual characteristics, such as clarity of feelings.

## 2. JASMINA BAKIC

Bakic, J., Pourtois, G., De Raedt, R.

Enhanced ERN-CRN components during probabilistic learning following the induction of positive mood

In this study, we explored modulatory effects of positive mood on the behavioral and electrophysiological correlates of probabilistic learning. For this purpose, we used a previously validated probabilistic learning task (Eppinger et al., 2008), while 64-channels EEG was recorded concurrently. Participants (n=31) were assigned either to a positive or a neutral (control) mood condition, which was maintained throughout the experiment. Positive mood was induced by means of a guided imagery procedure. Manipulation checks confirmed that participants in the positive mood group experienced higher levels of pleasantness and happiness than participants in the neutral mood group. Behavioral results show balanced learning slopes in the two groups, although participants in the positive mood group switched less often following negative feedback than participants in the neutral mood group, suggesting a change in the exploration-exploitation tradeoff as a function of positive affect. At the electrophysiological level, we found that the amplitude of the ERN-CRN component varied depending on the probabilities of the Stimulus-Response associations, equally so in both groups. However, this early action monitoring component was overall larger in the positive compared to the neutral mood group. Altogether, these results suggest therefore that positive mood could foster exploitation at the cost of exploration during probabilistic learning. More generally, these findings challenge the assumption that an enhanced ERN-CRN component necessarily denotes heightened negative affect.

# **3. EMBODIMENT AND EMOTIONAL MEMORY IN A SECOND LANGUAGE – AN EMG** STUDY

### Baumeister, J., Winkielman, P., Conrad, M., Rumiati, R. & Foroni, F.

Language and emotions are closely linked. However, previous research suggests that this link is stronger in a native language (L1) than in a second language (L2). Considering that emotional content is more saliently processed than neutral content, the question arises whether reduced emotionality in a second language in comparison to a first language leads also to less salient processing of emotional words in L2. The theories of embodied simulations state that the re-experience of emotional information (embodied simulations), for instance as reflected in facial motor resonance, supports the understanding and processing of emotional content. In a recent study we suggested that facial motor resonance also plays a role in the memory-enhancing effect of emotional language (EEM). We hypothesize that the processing of emotional content in L2 is associated with reduced facial motor resonance, which later manifests itself as the absence of an EEM effect. In order to test this hypothesis, 32 Spanish/English late bilinguals underwent a memory task involving emotional (happy and angry) and neutral words in L1 and L2 consisting of an encoding and retrieval phase. During the encoding phase facial electromyographic activity was recorded from the Zygomaticus and Corrugator muscles. Results demonstrate that participants show a reduced emotional response in L2 compared to L1. This was reflected by decreased and delayed EMG activity in response to emotional words in L2 and by an absence of EEM in L2 but not in L1. In summary, these findings underscore the role of embodiment in emotional language processing and emotional memory.

## 4. FIGHT OR FLIGHT: THE ROLE OF CONTROLLABILITY AND VALENCE

#### Bossuyt, E., Moors, A. & Kuppens, P.

Several researchers have suggested that feelings of anger and fear reflect the activation of fight and flight tendencies. To date, it remains unclear when and how these action tendencies are elicited. In a series of experiments we investigated the role of controllability and valence. In Experiment 1, we manipulated the appraisal of controllability and tested the hypothesis that a strong, uncontrollable, opponent automatically elicits a flee response, whereas a weak, controllable, opponent automatically elicits a fight response. In a computer task, participants were presented with a series of trials in which a strong or a weak opponent appeared on screen and attempted to steal money. Strong opponents were almost never defeated by the participant (fight/flight responses were mostly unsuccessful); weak opponents were always defeated the participant (fight/flight responses were always successful). Fighting resulted in the appearance of a fist that hit the opponent; fleeing resulted in taking the money and moving it away from the opponent. Contrary to the hypothesis, we found that participants were faster to fight strong opponents and flee from weak opponents than to fight weak opponents and flee from strong opponents. This pattern of results was replicated in Experiment 2. In Experiment 3, we investigated whether the current data pattern could be explained by the relation between controllability and valence: Strong opponents are more negative than weak opponents and this may explain why they elicit a tendency to fight. Valence was manipulated by presenting participants with opponents that stole 1 or 5 euro. Confirming our hypothesis, participants were faster to fight the most negative (5-euro) opponent and flee from the less negative (1-euro) opponent than to fight the less negative (1-euro) opponent and flee from the most negative (5-euro) opponent. Controllability and valence seem to influence fight and flight tendencies in similar ways.

# 5. RELEVANCE OF POSITIVE STIMULI BENEFITS WORKING MEMORY PERFORMANCE **OF ADOLESCENTS MORE THAN ADULTS**

#### Cromheeke, S. & Mueller, S.

Theories of adolescent behaviour suggest that the increase in risk-taking and sensation seeking in this age group is due to an increased sensitivity to emotional stimuli on the one hand and a relatively immature cognitive control system on the other hand. However, little research has outlined to what extent the relevance of the emotional stimuli biases the imbalance between affective processing and cognitive control. Twenty-seven adolescents (14 girls, ages 12-14) and 37 adults (18 women, ages 18-29) completed two attentional conditions of an emotional face 0-back/2-back task. In the 'relevant' emotion condition participants were asked to remember and/or compare the facial expression of the faces. In the 'irrelevant' condition they were asked to focus on the gender of the face, neglecting the emotional expression. The results revealed a working memory improvement for happy faces in the relevant but not in the irrelevant condition. Importantly, this improvement for happy faces was significantly larger in adolescents relative to adults and was linked to individual differences in the Behavioural Activation System (BAS). In contrast, emotion did not impact working memory performance in the irrelevant condition. The results are in-line with the triadic model of adolescent behaviour, which proposes a stronger reward-related and a weaker harm-avoidance system during adolescence, combined with a still immature cognitive control system. Future studies should examine to what extent the behavioural results of the current study are supported by the underlying neurobiology thought to play a role in cognition-emotion interaction during adolescence.

## 6. AFFECTIVE CONSEQUENCES OF SELF-FOCUS IN VULNERABLE AND GRANDIOSE NARCISSISTS

### Czarna, A.

The influence of self-focus in vulnerable and grandiose narcissists was researched in the experimental study (N=136). Results show that self-focus elicits negative self-conscious emotions (shame and guilt) in high vulnerable narcissists and positive self-conscious emotions (pride) in grandiose narcissists. The former relations were mediated by explicit self-esteem. Regardless of self-focus manipulation, vulnerable narcissism was positively related to anxiety, and negatively to pride, and grandiose narcissism was negatively related to feelings of shame, guilt and anxiety - these relations were also mediated by explicit self-esteem. Implicit self-esteem, measured with Initial Preference Task, did not improve prediction. The results are discussed in the light of existing knowledge about the distinction between vulnerable and grandiose narcissism.

## 7. THE INFLUENCE OF FRUSTRATION ON ABSTRACT DEONTOLOGICAL MORAL CHOICE AS A FUNCTION OF EMOTIONAL REGULATION SKILLS

#### Deak, C. & Saroglou, V.

Moral decisions are fundamentally linked to emotions that guide cognitions as well as actions in specific situations (Kohlberg, 1984; Nucci, 2001; Sweder, 2002). When facing moral dilemmas opposing deontological moral principles with interpersonal concerns, some people prefer to respect the former even if it is at the detriment of the well-being and the survival of others (Van Pachterbeke et al., 2011). When we face a moral dilemma we are not always in a neutral emotional state and the question arises whether the abstract moral choice depends only on emotional skills or also on the emotional state of the person at that moment. To answer this question we investigated the influence of one specific emotional state, frustration, and its effects on people's moral choices. At time one participants (N = 150) evaluated themselves on aspects of emotional intelligence (five subscales; Petrides, 2006). Some day later, at time two they were randomly assigned to two experimental conditions (low versus high frustration), then asked to make decisions on a set of nine moral dilemmas. These dilemmas can be categorized into two groups: "soft" dilemmas including milder consequences and "strong" dilemmas containing severe consequences for the responder. There was no direct effect of frustration on moral choice; nonetheless there was an interaction between one aspect of emotional intelligence (emotional regulation) and frustration in strong conflict dilemmas. Among participants with low emotional regulation those who were frustrated chose more often to follow deontological rules when facing a moral dilemma than those who were not frustrated. These results suggest that when people feel frustrated and cannot regulate their emotions well, they would probably fail to consider the well-being of others in moral dilemmas where the consequences of their choice are morally important for them.

# 8. TWELVE MONTH OLDS USE OTHER'S INTEREST TO APPRAISE THEIR **ENVIRONMENT**

## Dukes, D., Foudon, N. & Clément, F.

In a recent paper, we argued that the ability to recognize the expression of interest might provide a route for the transmission of social values, even in a non-ostensive way (Clément and Dukes, 2013). Based on the relevant research, we speculated that this ability emerges in the second year of life. The experiment reported below provides experimental evidence supporting this claim.

Three groups of participants (9 months old, 12 months old and 15 months old) were sat on their parent's knees in front of a table. Experimenter 1 placed two objects analogous in size and colour in the furthest corners from the baby before turning his back to the parent and child. At that point, experimenter 2 entered the room and, without exchanging a glance with the child, looked at each of the two objects for 5 seconds. The only difference was that one object was looked at with an expression of interest, and the other with disinterest (orders and objects counterbalanced). Experimenter 2 then left the room. This scenario was repeated four times with different objects.

Results showed that 12 month-old participants looked significantly more at the interesting object than at the disinteresting object, F(1,17)=15.027, p<.001 for the first two times, but not the third and fourth time. No such significant relationships were found at 9 or 15 months: younger infants did not seem to be sensitive to the difference in expression and 15 month-olds were also intrigued by the apparently non interesting, but very similar, objects.

We conclude that the expression of interest is understood and transmitted around the age of 12 -15 months, even when it is subtly expressed. Such ability could help our understanding of the transmission of social values and the development of emotional experience in babies.

# 9. ATTENTION TO EMOTION EXPRESSIONS IN THE WIDER SPECTRUM OF AUTISM **TRAITS**

### Griffiths, P., Black, J. & Ashwin, C.

On a day to day basis we are presented with a host of visual information. In order to navigate the social world, we have to be able to quickly and effectively distinguish the important social events in our surroundings. Attention can only direct gaze to one visual item at a time. As such, the dot-probe paradigm was created to investigate our attention systems implicit priorities by presenting two competing visual stimuli and measuring reaction time to subsequent probes. As people with autism generally have difficulties with social interaction, especially negative emotions, the current study aimed to investigate whether this was related to the attention mechanisms for emotional expression information across the wider spectrum of autism traits.

The current study employed a dot-probe paradigm in order to assess how people from the general population with high and low autism traits attend to facial expressions. The dot-probe paradigm presented either a happy or angry expression simultaneously with a neutral expression. Following this brief presentation, a probe was presented in the place of one of the stimuli. Participants were required to respond to the probe as quickly as possible. Results revealed that those with higher autism traits paid preferential attention towards emotional expressions over neutral expressions regardless of valence.

This result suggests that those who self-report high traits of autism have an attention bias towards emotional expressions compared to those with lower traits. This is reminiscent of people with social anxiety who show an attention bias towards disorder related stimuli such as threat related stimuli. People with a diagnosis of autism often have issues with social and emotional information. As such, preferential attention bias towards emotions in those with high autism traits may represent long term and real life difficulties with emotional information that has increased the salience of emotion for these individuals.

# **10. AMPLIFICATION OF ATTENTIONAL BLINK BY DISTRESS-RELATED FACIAL EXPRESSIONS: RELATIONSHIPS WITH ALEXITHYMIA AND AFFECTIVITY**

### Grynberg, D., Vermeulen, N. & Luminet, O.

The present studies aimed to analyse the modulatory effect of distressing facial expressions on attention processing. The attentional blink (AB) paradigm is one of the most widely used paradigms for studying temporal attention, and is increasingly applied to study the temporal dynamics of emotion processing. The aims of this study were to investigate how identifying fear and pain facial expressions (Study 1) and fear and anger facial expressions (Study 2) would influence the detection of subsequent stimuli presented within short time intervals, and to assess the moderating influence of alexithymia and affectivity on this effect. It has been suggested that high alexithymia scorers need more attentional resources to process distressing facial expressions and that negative affectivity increases the AB. We showed that fear, anger and pain produced an AB and that alexithymia moderated it such that difficulty in describing feelings (Study 1) and externally oriented thinking (Study 2) were associated with higher interference after the processing of fear and anger at short time presentations. These studies provide evidence that distressing facial expressions modulate the attentional processing at short time intervals and that alexithymia influences the early attentional processing of fear and anger expressions. Controlling for state affect did not change these conclusions.

# 11. "THE NOISE IN THE ROOM IS MAKING ME ANGRY!" - DISPLAY RULES IN LECTURER-STUDENT INTERACTION IN GERMANY AND RUSSIA

### Hansen, M. & Mendzheritskaya, J.

We conducted an online-study with lecturers at universities in Germany (N = 60) and Russia (N = 99). Our participants completed a modified version of the Display Rule Assessment Inventory (Matsumoto et al., 2008) and judged the appropriate expression mode for seven emotions towards students. We varied the student's gender as well as the type of situation (lecture vs. consultation hour). In line with our expectations, results displayed significant effects of culture, emotion, and the type of situation: Lecturers in Russia reported to amplify their emotions whereas German lecturers reported to diminish the expression of emotion by using 'deamplifing' strategies. Lecturers in both countries reported to mask their emotions more in consultation hours compared to lectures. Positive emotions were expressed with greater authenticity compared to negative emotions. Additionally, results revealed significant interactions of emotion and culture, as well as emotion and student's gender: Russian academics report displaying negative emotions with greater expressivity and higher authenticity as German lecturers. Further, happiness is displayed with higher expressivity towards female students, and anger with higher expressivity towards male students.

We will discuss the results in the context of cultural communication and emotions at universities.

# 12. AGE-RELATED EFFECT ON EXPRESSIVE ENHANCEMENT AND SUPPRESSION OF THE EMOTION ELICITED BY HUMOROUS STIMULI

### Harm, J. & Vieillard, S.

Socioemotional Selectivity Theory (Carstensen & al., 1999) has postulated that older adults were better to regulate their emotions but to date, findings from laboratory studies have remained scarce and little convincing evidence exists for such age-related improvement. Furthermore, while aging is associated with a prioritized processing of positivity, no study has yet addressed whether aging may affect the ability to inhibit or favor positive emotion. In the present study, 75 participants (25 young, 25 middle-aged and 25 older adults) were instructed to simply watch, enhance or suppress their expression of mirth while looking at 12 humorous 30-second long cartoons. Subjective, behavioral, physiological and cognitive consequences of expressive regulation were measured through several cues such as amusement rating, self-reported success to implement regulation instruction, gaze direction, facial muscle activity, skin conductance level, cardiac activity and recall of the cartoons. Results showed that the age groups were equally sensitive to humorous stimuli. The pattern of facial activity and physiological responses (SCL) verified that participants succeed to control their expressions. Moreover and contrary to previous data indicating that suppression of negative expression was physiologically costly, the instruction to inhibit mirth did not appear physiologically demanding. Finally, no age-related changes were found in the subjective, behavioral, physiological, and cognitive consequences of expressive regulation, suggesting that older adults' ability to control positive expression was preserved. Current findings were discussed in the framework of theoretical models related to emotion regulation and socio-affective development.

#### References

Carstensen, L.L., Isaacowitz, D.M., & Charles, S.T. (1999). Taking time seriously: A theory of socioemotional

## 13. STILL A FRIEND? HOW FEELINGS OF GUILT EVOKE RE-EVALUATIONS OF SOCIAL **RELATIONS**

#### Harth, N.

In the current literature, emotions are mainly discussed as functional in a social sense that is, as phenomena that form and maintain social relationships (Fischer & Manstead, 2008). This talk deals with the question how emotion regulation affects the regulation of social relationships. I will present a novel approach that highlights the importance of psychological closeness as a central factor for emotion regulation. I will argue that emotion models should be contextually contingent in order to understand how emotions are regulated. Based on empirical data I will argue that a specific emotion can unfold differently depending on the type of interpersonal relationship in which it is experienced. A series of experimental studies, using self-report as well as behavioral measures, shows that the emotion intensity is not influenced by closeness, but closeness defines how the emotion is regulated. This perspective extends the current view of emotion and allows us to predict behavioral outcomes more precisely. Moreover, it helps to explain contradictory findings in the literature and to answer questions such as when does guilt lead to reparation and when does it lead to disengagement strategies.

## **14. EMOTIONAL ACCULTURATION IN MINORITY YOUTH**

### Jasini, A., De Leersnyder, J. & Mesquita, B.

Previous research has shown that the more immigrants are exposed to the host culture, the more similar their patterns of emotional experience are to the average host culture's emotional pattern (De Leersnyder, Mesquita, & Kim, 2011). This process, named Emotional Acculturation, has also been theorized to have an impact on immigrants' wellbeing. In the current research we investigated emotional acculturation in a large sample of immigrant children (n=1908) from a random selection of representative Belgian schools. We expected that the quantity of contact with Belgian children would predict minority children's emotional fit to the Belgian culture. We also investigated whether the minority children's emotional fit to the Belgian culture predicted their level of school engagement and wellbeing at school. We used an adjusted version of the Emotional Patterns Questionnaire, in which both minority (N=1908) and majority (N=1329) children were asked to think about situations that happened in school, and reported how they felt by filling in 15 rating scales of emotion; children reported situations that matched a prompt in which the valence (positive vs. negative) and the social orientation (related vs. individuating) of the situation were specified. As in previous studies, the emotional fit to the Belgian culture was measured by correlating minority children's emotional pattern with the average pattern of children from the majority culture in comparable situations. The findings confirm our predictions that, in the school context, the quantity of contact with Belgian children positively predicts the minority children's emotional fit to the Belgian culture. Furthermore, we show that the minority children's fit to the normative Belgian pattern is related to their school engagement and wellbeing.

## **15. THE INFLUENCE OF META-MOOD ON MOOD CONGRUENCY**

### Kavcioglu, F.

The accurate recognition of facial expressions plays an important role in social encounters in daily life; however, this ability can be affected by a negative mood state. As individuals differ in terms of how they evaluate and regulate their mood (meta-mood experience), the aim of the current study was to investigate the roles of metamood on the mood congruency effect in recognizing neutral facial expressions, among emotional faces. A sad mood induction procedure was conducted to a non-clinical university student sample (N=164), followed by a facial emotion recognition task consisting of two blocks: display duration of facial expressions for 50ms and for 2000ms. Personality traits, psychological symptoms, trait and state meta-mood levels, and current mood states before and after the mood induction were assessed with relevant questionnaires. Mislabeling natural faces as sad were examined. Hierarchical regression analyses revealed that, for the 50ms display duration condition, among personality traits agreeableness was negatively associated with perceiving neutral faces as sad. After controlling for personality traits; however, unpleasant mood was a predictor of such a bias. There was also a tendency to label natural faces as happy in the 2000ms duration condition. Anxiety was found to be a positive predictor for such a bias. After controlling for symptomatology, among personality traits, extraversion and conscientiousness were found to be negatively associated with such a categorization bias. Lastly, the meta-mood levels of individuals also had significant effects. Perceiving an ongoing mood as 'typical' was found to be negatively associated with such categorization bias. Lastly, emotional repair was found to be negatively associated with mood congruent cognitive biases. The results indicate that personality, as well as meta-mood levels have an influence on cognitive processes. A change in the evaluation and regulation of a mood may also alter the influence of mood on cognitive processes.

## 16. EMOTIONAL INTELLIGENCE AND THE EFFECTIVENESS OF ANGER REGULATION **STRATEGIES**

### Kobylińska, D. & Śmieja-Nęcka, M.

From our earlier correlational studies we have learned that the level of emotional intelligence (measured by ability test) is related to using emotion regulation strategies: suppression and reappraisal (measured by ERQ). In the two present experiments we checked if emotional intelligence is related to effectiveness of anger regulation. We induced anger by a movie clip ("My Bodygourd"). The level of emotions was measured before watching the clip by PANAS and after the clip by PANAS (explicit emotions) and IPANAT (implicit emotions). In Study 1 we checked if participants who had a goal of regulating their emotions differed from those without such goal and if it was mediated by the level of EI or habitual use of suppression and reappraisal. In Study 2 we checked if reappraisal is a strategy spontaneously used by emotionally intelligent people, when they are not instructed to reappraise, or used more effectively when they are instructed (compared to participants with lowe level of EI). The results show some interesting effects. The goal of regulating emotions changed anger regulation effectiveness more in people with high EI then with low EI, however the effect was opposite to expected. Morover effectiveness of reappraisal interacted with EI level.

# **17. EMOTIONAL EXPRESSION AND THE PERCEPTION OF COMPETENCE: THE IMPACT** OF GENDER AND ETHNIC GROUP MEMBERSHIP

### Krauth-Gruber, S.

Previous research revealed that certain emotional expressions such as happiness, sadness, fear and shame are stereotypically associated with women while the expression of anger or pride are considered typical and appropriate for men (Plant et al 2000; Timmers, Fischer, & Manstead, 2003). Furthermore, specific emotional expressions have been shown to be associated with personality traits such as social dominance (Hareli, Shomrat &Hess, 2009) and social status and competence (Brescoll & Uhlmann, 2008). Two studies examined the relationship between emotional expression and status conferral as a function of gender, and ethnic group membership. In Study1 participants believed women and Africans to express a smile more frequently, and men, Asians and Caucasians to show an inexpressive face more often, and Asians to express anger less frequently. Study2 revealed that in a professional setting, smiling male Africans, angry looking female Africans and inexpressive Asian job candidates were perceived as less competent and less hireable compared to their genderand ethnic counterpart. The theoretical implications and practical applications are discussed within Rudman and Fairchild's (2004) integrative model of stereotype-based backlash according to which counterstereotypical behavior can result in social and economic reprisals.

## **18. DIFFERENCES IN NEGATIVE EMOTION DIFFERENTIATION WITHIN AND BETWEEN INDIVIDUALS: AN APPLICATION OF MULTILEVEL LATENT CLASS ANALYSIS**

### Lischetzke, T.

The ability to differentiate between discrete negative emotions with precision has been termed negative emotion differentiation. "High differentiators" distinguish between emotions such as anger, sadness, or shame when describing their emotional experience whereas "low differentiators" describe their feelings along a broad pleasantunpleasant continuum. Just as there are differences between individuals, so too there are differences within individuals. In some situations, only one distinct negative emotion may be experienced, and in others a mixture of negative emotions may be experienced. To date, research on momentary emotion differentiation is scarce. Therefore, the first aim was to explore which momentary patterns of negative emotions occur in the daily life of young adults and to test whether these patterns differ in event appraisals. The second aim was to test whether subgroups of individuals could be identified who differ in the frequency with which they experience specific momentary patterns (high vs. low emotion differentiators). To model within- and between-persons differences simultaneously, a multilevel latent class analysis (ML-LCA) was applied to an ambulatory assessment data set (N = 51, three occasions per day, seven days). At each occasion, participants rated their negative emotional experience since the last signal (anger, sadness, shame, disappointment, anxiety). A model with four latent occasion-level classes and four latent person-level classes fit the data best. The occasion-level classes represented moments with a high probability of (a) all negative emotions, (b) anger, (c) anger plus disappointment, or (d) anxiety plus anger. They differed in event appraisals. One subgroup of individuals had a very high probability of reporting the "allnegative-emotions-pattern" and a low probability of reporting other patterns over time (low differentiation). In addition, two types of high differentiation subgroups and an intermediate subgroup were identified. The personlevel classes differed in daily emotion regulation. The results demonstrate that ML-LCA can be a useful tool to analyze emotion differentiation as "state" and "trait".

# 19. CHANGES IN BASIC BELIEFS AND POST-STRESS GROWTH: A CROSS-SECTIONAL STUDY ON THE STRONG IMPACT OF POSITIVE EVENTS ON WELL-BEING

### Martínez-Zelaya, G., da Costa, S., Páez, D. & Bilbao, M.

A retrospective cross-sectional study with a sample of 304 university students and relatives asked about the most important recent extreme life change events, its impact on basic beliefs and on personal growth following the life event. Positive events reinforce positive basic beliefs much more than negative events transform these beliefs from positive to neutral. On the other hand, positive events transform them from positive into highly positive. It was also found that extreme positive events generate as much growth or flourishing after its onset as negative events. The development of new possibilities and changes of life priorities are produced by both positive and negative extreme events. Negative events specifically produce growth effects of reinforcement of personal strength and of valuing social support. Changes in basic beliefs are congruently associated with personal growth in the case of negative and ambivalent events.

# 20. APPRAISALS INTERACT TO DIFFERENTIATE MULTI-COMPONENTIAL EMOTION **RESPONSES**

### Meuleman, B., Moors, A., Scherer, K.R. & Fontaine, J.R.J.

Studies that investigated the relation between appraisal and emotion have been dominated by what we call the basic appraisal model, which assumes that appraisal variables have a linear effect on discrete emotion categories. These assumptions do not correspond with two important theoretical propositions of appraisal theory. The first is that the dependent variable should not be a discrete emotion category but variables reflecting motivation, physiology, and expression, corresponding to the multi-componential definition of emotion (Frijda & Zeelenberg, 2001). The second is that appraisal variables are assumed to interact to predict emotions, and thus show nonlinear effects (e.g., Lazarus, 2001; Roseman, 2001; Scherer, 2009). The current study modelled interaction effects of appraisal variables on multivariate ratings of motivation, expression, and physiology simultaneously. We applied a combination of principal component analysis (PCA) for data reduction, and multivariate adaptive regression splines (MARS) for automatic interaction identification. Data were obtained from a cross-cultural study on emotion concepts conducted in 27 countries (Fontaine, Scherer, & Soriano, in press). Results of modelling showed (a) that both appraisal predictors and component responses have a lower-dimensional structure, (b) that appraisal of relevance, goal compatibility, coping potential, and suddenness show main effects on component responses, (c) that appraisals of agency and norm compatibility uniquely show interaction effects on component responses, and finally (d) that interactions are most important to predict dominance actions in component responses.

# 21. UNCONSCIOUS EMOTION REGULATION IN YOUNG AND OLDER ADULTS: PHYSIOLOGICAL AND BEHAVIORAL MEASURES

## Rodríguez, A. & Vieillard, S.

Despite cognitive decline associated to aging, some findings have suggested enhanced emotion regulation in advancing age. Automatic mechanisms underlying emotion regulation have been proposed as an explanatory postulate to account for older adults' improvement in emotion control (Henry et al., 2009; Scheibe and Blanchard-Fields, 2009), nonetheless to date, no study has investigated them. The present research aimed to explore the relationship between aging and unconscious emotion regulation by examining the hypothesis that with age, emotion regulation might become automatic, less cognitive costly and therefore more susceptible to priming effects. Thirty-three younger and 16 older adults were assessed to control for cognitive, affective and personality differences. Then, following the procedure employed by Williams et al (2009), we manipulated unconscious emotion regulation by priming a reappraisal goal with the expectation that compared to non-primed participants, primed subjects would experience a decreased physiological and subjective reaction when taking part in a stressinducing task. Additionally, we expected this effect to be more pronounced in older adults given the automatic mechanisms emerging in old age. Preliminary results failed to replicate those of Williams' (2009). However, consistent with the literature on aging and emotion regulation, our findings showed that compared to younger adults, older adults reported less anxiety and stress and overall decreased patterns of physiological activation when taking part in a stress-inducing task. These preliminary results that need to be confirmed in a larger sample size were discussed in light of the Socioemotional Selectivity Theory framework.

## 22. EMOTION WORDS IN COMMUNICATIVE SITUATIONS: AN ERP STUDY

## Rohr, L. & Abdel Rahman, R.

Emotional verbal messages are typically conveyed in meaningful contexts, either embedded in wider text contexts during reading or encountered auditorily in communicative situations and in the presence of a speaker during social interactions. Yet, and in contrast to real life situations, emotion words are often investigated by confronting single participants with isolated words on a computer screen, thus potentially lacking ecological validity.

In the present study we presented emotion words in communicative contexts, hypothesizing that the effects of isolated words should be strongly augmented by the presence of a speaker. We presented videos of a speaker with a neutral facial expression producing emotional or neutral words, comparing emotion effects when the listener was directly addressed (direct gaze, mouth articulating the words) with a non-communicative situation with closed eyes and mouth, measuring event-related brain potentials (ERPs). Additionally, the self-relevance of the words was varied, assuming that augmented emotion effects in communicative contexts should be boosted even more when the words can be interpreted as being directed to the listener (i.e., potentially describe the listener, e.g.: tyrant, vs. not, e.g.: war).

Emotion effects were strongly enhanced by communicative contexts, starting earlier and lasting longer in the communicative situation. In contrast, the main effect of self-relevance, generally resembling emotion effects in ERPs, was unaffected by context. Crucially, the effects of emotion words were also strongly modulated by selfrelevance, and this modulation was found in the communicative situation only. Together, the present findings demonstrate that emotion effects are determined by the potential self-relevance of the stimuli and that communicative situations – in which verbal emotions are typically encountered – strongly enhance emotion effects, underlining the importance of social contexts in emotion processing.

# 22. IS EMOTION SUPPRESSION HARMFUL? IT DEPENDS ON SELF-REGULATORY **STRENGTH**

## Schröder-Abé, M. & Geisler, F.

Expressive suppression is an emotion regulation strategy that intervenes late in the emotion-generative process and requires effortful self-control. Thus, the consequences of expressive suppression may differ depending on selfregulatory strength. We examined the influence of self-regulatory strength level on the outcomes of spontaneous expressive suppression in participants (N = 102) who discussed a topic of conflict with their partners. Selfregulatory strength was assessed via high-frequency heart rate variability measured at rest (HF-HRV); expressive suppression, affect, and relationship satisfaction were self-rated; and social behavior was observer rated. As expected, HF-HRV and expressive suppression significantly interacted in predicting the outcomes. Expressive suppression was positively associated with negative affect in participants with low (but not high) HF-HRV. Furthermore, expressive suppression was positively associated with relationship satisfaction of the partner and constructive social behavior in participants with high (but not low) HF-HRV. To conclude, the present research demonstrates how the process model of emotion regulation and the limited strength model of self-control can be integrated to yield a more differentiated perspective on the outcomes of expressive suppression.

# 23. HOSTILE ATTRIBUTION "BIAS"? AGGRESSIVE INDIVIDUALS DISPLAY BETTER PERFORMANCE IN THE IDENTIFICATION OF AGGRESSIVE INFORMATION

## Teige-Mocigemba, S., Hölzenbein, F. & Klauer, K.

Researchers have long argued that aggressive individuals automatically tend to perceive hostile intent on the part of others, even when it is really lacking (hostile attribution bias). In terms of emotion recognition, this overall biased perception of the social environment as aggressive should lead to a pattern of more accurate responses in the identification of aggressive information and less accurate (because more aggressive) responses in the identification of non-aggressive information, the more aggressive participants are. Contrary to this prediction, Wilkowski and Robinson (2012) recently showed that accuracy in the identification of subtle facial expressions of anger was greater the more aggressive individuals were, whereas accuracy in identifying other emotional expressions was unrelated to self-reported aggressiveness.

In the present study, the ecological validity of this finding was tested by using photographed facial expressions of real (instead of computer-generated) people. Second, it was investigated whether the effect is specific to facial expressions or can be found in silhouettes displaying aggressive versus non-aggressive actions as well. A third focus was on the development of measures that meet the psychometric requirements for the reliable assessment of interindividual differences in the accuracy of identifying aggressive information.

65 males worked through a Dynamic Emotion Identification Task, a Mood of the Crowd task, a Semantic Misattribution Procedure, two Random Image Structure Evolution Sequence tasks, and self-report measures of aggressiveness. Results by and large confirmed Wilkowski and Robinson's account: The more aggressive participants were, the more accurately did they identify aggressive information, whereas accuracy in the identification of non-aggressive information was not a function of self-reported aggressiveness. The newly developed measures showed promising reliabilities and meaningful external correlations. The findings are discussed with regard to the role of automatic (perceptual) processes in aggression and with regard to the assessment of these processes.

# 24. INTERPRETIVE BIAS OF NEUTRAL AUDITORY STIMULI AND INTENSITY JUDGMENTS OF EMOTIONAL AUDITORY STIMULI: PERSONALITY EFFECTS.

Traeger, T., Lischetzke, T., Cugialy, M., Niedeggen, M. & Eid, M.

Interpretive bias refers to the extent to which individuals tend to form their own interpretations of ambiguous or neutral stimuli. Previous research has shown that individuals with high trait anxiety produced more negative interpretations of ambiguous or neutral stimuli than individuals with low trait anxiety. Surprisingly, research on the relation of extraversion and neuroticism with interpretive biases of neutral stimuli, in particular auditory stimuli, are rather scarce.

Hence, the purpose of the present study was to test whether extraverted (vs. introverted) individuals show a positive interpretive bias and whether neurotic (vs. stable) individuals a negative interpretive bias when judging the emotional content of neutral stimuli. Moreover, we analyzed whether extraversion is related to higher intensity judgments of stimuli spoken with a happy intonation and whether neuroticism is related to higher intensity judgments of stimuli spoken with a negative intonation.

Participants (N = 50) rated the emotional intonation of a total of 100 semantically neutral sentences spoken with one of four different emotional intonations (happy, angry, sad, fearful) or in a neutral voice.

The findings showed that (a) neurotic (compared with stable) individuals exhibited both a positive and a negative interpretive bias with regard to the evaluation of neutral auditory stimuli and (b) individuals with higher scores on the neuroticism scale produced greater intensity judgments concerning the stimuli expressing distinct emotional states.

The results are discussed with respect to the role of different response styles and affect intensity.

## 25. THE INTERPLAY BETWEEN THE ANTICIPATION AND SUBSEQUENT ONLINE PROCESSING OF EMOTIONAL INFORMATION AS MEASURED BY PUPILLARY **DILATATION: THE ROLE OF COGNITIVE REAPPRAISAL**

### Vanderhasselt, M., Remue, J., Ng, K. & De Raedt, R.

Emotions can occur during an emotion eliciting event, but they can also arise when anticipating the event. We used pupillary responses, as a measure of effortful cognitive processing, to test whether the anticipation of an emotional stimulus (positive and negative) influences the subsequent online processing of that emotional stimulus. Moreover, we tested whether individual differences in the habitual use of emotion regulation strategies are associated with pupillary responses during the anticipation and/or online processing of this emotional stimulus. First, our results show that, both for positive and negative stimuli, pupillary diameter during the anticipation of emotion eliciting events is inversely correlated to the pupillary response during the emotional picture presentation. These individual differences in the temporal interplay between anticipation and online processing of emotional events are found to be associated to habitual tendencies in cognitive reappraisal to r egulate emotions in daily life. High reappraisal scores predicted enhanced pupillary responses during the anticipation and subsequent smaller pupillary responses during the online processing of emotion eliciting events (the opposite was observed for low reappraisal scores). Possibly, based on the functional roles of activation in the dorsolateral prefrontal cortex (e.g., attentional set, cognitive control and emotion regulation), larger pupillary responses during the anticipation of an emotional stimulus refers to sustained attentional set activation to prepare for an upcoming emotional context. This enhanced preparation might subsequently lead to a reduced need to process emotional stimuli when being confronted with them, which might indicate relatively less effort over time to cope with the emotional stimulus. This association between anticipation and online processing is most strongly for habitual reappraisers. Because the habitual use of reappraisal is known to have a posi tive inf luence on emotional well-being, the interplay between anticipation and online processing of emotional stimuli might be a significant marker of this well-being.

# 26. NEUROPHYSIOLOGICAL EVIDENCE FOR THE BENEFICIAL EFFECT OF A BROADER ATTENTION FOCUS WITH POSITIVE MOOD AT THE RESPONSE LEVEL

## Vanlessen, N., Rossi, V., De Raedt, R. & Pourtois, G.

Previous research suggested that positive mood can modulate (higher-order) cognitive processes through broadening effects on attention, although it remains unclear what the underlying mechanisms might be. In this study, we used high density event-related potentials to investigate if changes in early visual sensory processing elicited by positive mood could predict later response-related effects. To investigate this, we randomly assigned participants to a positive or neutral mood condition, followed by a localization task. In this task, peripheral stimuli were presented randomly at one out of three concurrent positions in the upper visual field, and participants were instructed to respond only to stimuli appearing at a pre-defined location. Our electrophysiological results showed an enhanced early retinotopic encoding of stimuli at the level of V1 (indexed by C1) in the positive compared to the neutral mood group. In order to assess if such early perceptual facilitation would also influence later responserelated processes, we looked at the early negative ERP component following erroneous (error-related negativity; ERN) and correct responses (CRN) during action monitoring. We found a large ERN for response errors and a small CRN for correct responses. Interestingly, the ERN-CRN difference was significantly larger in the positive compared to the neutral mood group (despite a balanced accuracy in these two groups), suggesting enhanced early action monitoring processes in the positive relative to the neutral mood group. Although we did not find a direct correlation between this response-related effect and the earlier change in sensory processing (C1), these results suggest that positive mood could reduce response uncertainty arising from the stimulus localization task because a more efficient spatial encoding of the stimuli took place earlier at the perceptual level in this specific mood state (C1 results).

## 27. ALTERED PROCESSING OF DISTRACTING EMOTIONS IN ADOLESCENTS WITH ADHD

### Vetter, N., Buse, J., Roessner, V. & Smolka, M.

Attention Deficit Hyperactivity Disorder (ADHD) is a major health problem, affecting 3-9% of adolescents, characterized by symptoms of hyperactivity, inattentiveness and impulsivity. This includes on the one hand dysfunctional emotion regulation and social problems, and on the other hand problems in functional distribution of attention. Specifically challenging might be the distribution of attention resources when confronted with emotional distractors outside of the current attention focus. We investigated the neural correlates of distributing attention towards negative and positive emotional distractors and targets in male adolescent ADHD patients and matched healthy controls with a mean age of 14. Participants performed a perceptual discrimination task in which visual target and distractor stimuli varied systematically with regard to emotional valence. We hypothesized slower reaction times for the processing of emotional versus neutral stimuli in ADHD versus controls and analyzed the neural data exploratory on the whole brain level. Behaviorally, positive distractors elicited slower reaction times in ADHD versus controls. On the neural level, a three-way interaction of age group x attention-condition x valence was found in the caudate nucleus. This interaction was driven by higher activation for ADHD versus controls towards negative targets and positive distractors. The finding of a different processing of positive distractors in the caudate nucleus fits nicely to our behavioral results of slower RTs for positive distractors in ADHD versus controls. The caudate nucleus has been suggested to modulate cognitive functions related to the prefrontal cortex. Both functional and structural alterations in the caudate nucleus in ADHD have been found in previous studies. Our neural and behavioral results suggest an altered processing of distracting emotions in adolescents with ADHD. Overall, neurocognitive differences of adolescents with ADHD in comparison to controls might underlie altered emotion regulation in this disorder.

# 29. A NETWORK APPROACH TO EMOTION DYNAMICS: THE RELATION BETWEEN NEUROTICISM AND EMOTION NETWORK CHARACTERISTICS

## Vissers, N., Bringmann, L., Vanpaemel, W., Kuppens, P. & Tuerlinckx, F.

People's day-to-day emotional lives are complex study objects: People experience several emotions across time, different emotions can co-exist, and they influence each other over time. To capture this complexity, we put forward a network approach to emotion dynamics. In this approach, a set of emotions is considered as a dynamic network in which they influence each other across time. This allows us to examine temporal aspects of emotions within the context of multiple dynamically interacting emotions. The study explores whether the network perspective can provide new insights on the relation between temporal emotion dynamics and the personality trait of neuroticism.

Data from two Experience Sampling Method (ESM) studies were analyzed. In both studies, participants had repeatedly reported about their emotions within the context of their daily life. Data on six emotions were analyzed (anger, dysphoria, sadness, fear, relaxation and happiness). From these data, a network structure was derived with a multilevel vector autoregressive model. The model estimates the strength of the connections between the different emotions over time (e.g., the relation between sadness at the current moment and anxiety at a previous moment, controlling for the other emotions in the network). Both an average population network and an individual network per participant were derived. From the participant's individual networks, multiple characteristics were examined for their relation with neuroticism.

Across the two data sets, participants' neuroticism scores were consistently related to several characteristics of their emotion networks (e.g., the connection strength between negative emotions over time or the influence strength of positive on negative emotions over time). Taken together, participants with a higher neuroticism score were characterized by more strongly connected networks, indicating that high neurotics' emotion system is more self-determined than that of low neurotics. In general, this study emphasizes the usefulness of a network perspective on emotion dynamics.

## **30. ATTENTION PROBLEMS AND EMOTION UNDERSTANDING IN CHILDREN**

### Von Salisch, M.

Attention problems among children young tend to be persistent, hinder them in the acquisition of knowledge, and often lead to compromised outcomes in terms of academic achievements and psychosocial adaptation, because difficulties in paying or sustaining attention diminishes their ability to focus on relevant aspects of the (learning) situation, to benefit from verbal input, and to keep "lessons learned" in mind. Attention problems are likely to impair children's ability to learn about emotions as well. This is the first direction of effects. On the other hand, children with little knowledge of emotions may have difficulties in representing their emotions and those of others in their minds, in sharing them with others and perhaps also in regulating them, so that they need to spend more time and effort in figuring them out and may thus often appear inattentive and absorbed in their own thoughts (and emotions).

In order to disentangle the direction of effects, 265 four- to- six-year-olds were interviewed twice individually on their emotion knowledge with the Test of Emotion Comprehension and once on their receptive language skills. Their kindergarten teachers rated them on problems with attention and externalizing behavior on the Strength and Difficulties Questionnaire at T1 and T2 that were on average 14 months apart. Parents reported on SES.

A cross-lagged panel model indicates that children's emotion knowledge at T1 contributed to the prediction of their attention problems at T2, after language abilities and attention problems at T1 were controlled. The other cross path from attention problems to emotion knowledge was not significant. Adding self-regulation, externalizing problems, or SES as third variables did not alter this effect. Ways in which emotion knowledge impinges on attention are discussed.

# **31. DEPRESSION IN EARLY ADOLESCENCE: THE RELATIONSHIP BETWEEN EMOTION** AND COGNITIVE INHIBITION

## Wante, L., Braet, C. & Mueller, S.

Background: Major depressive disorder (MDD) among children and adolescents is a severe and disabling mental illness often characterized by recurrent episodes of depressed or irritable mood. Despite the high prevalence and the negative long-term consequences associated with MDD, research on the underlying cognitive mechanisms explaining the development and maintenance of MDD in adolescents is still incomplete. Previous research in depressed adults already revealed strongly impaired inhibition towards negative information. This bias could hinder an adequate emotion regulation and thereby impede an effective recovery from negative mood. The central goal of the current study was therefore to investigate inhibitory functioning towards emotional material in adolescents with depressive symptoms.

Methods: To explore inhibitory functioning in the processing of emotional material, an affective modification of the negative priming (NAP) task with pictures of angry and happy facial expressions was administered in referred and non-referred youngsters (age: 10-15 years). We hypothesized a failing inhibitory functioning towards emotional information in youngsters with high levels of depressive symptoms compared to youngsters with low levels of depressive symptoms. More specifically, we hypothesized that youngsters high in depressive symptoms would have more difficulties inhibiting negatively valenced stimuli and therefore would show a reduced negative affective priming affect.

Results: In contrast to our hypothesis, youngsters with high levels of depressive symptoms showed higher levels of inhibition towards negative information compared to youngsters who were low in depressive symptoms.

Discussion: It might be that youngsters with elevated depressive symptoms increase cognitive effort to improve their negative mood state (mood repair strategy). More studies are needed to replicate these findings in clinical samples and in follow-up studies.

# 32. EFFECT OF PARTICIPATION IN A COLLECTIVE ACTION ON IDENTITY FUSION, SOCIAL INTEGRATION, AND SOCIAL BELIEFS.

### Wlodarczyk, A., Zumeta, L., Basabe, N. & Páez, D.

First in a field study and then in an experimental one, we tested whether participation in a collective action elicits identity fusion, social integration, and consolidation of social beliefs. In a questionnaire survey, respondents involved in a national socio-political protest movement born in Spain in May 2012 were compared to participants in smaller demonstrations. The predictions were supported. Furthermore, perceived social support and efficacy correlated positively with extent of participation and emotions mediated this relationship. Next, in the experimental study, by random assignment, half of participants were led to involve themselves in a demonstration defending egalitarian rights for immigrants whereas the other half took part together in a non-collective control activity. Measures taken before, during and after participation showed that compared to the control, participating in a demonstration enhanced identity fusion, collective self-esteem and perceived similarity with the group, and decreased perceived threat, mistrust and insecurity with respect to immigrants.

# 33. AM I MORE SUSCEPTIBLE TO CATCHING YOUR MOOD IF YOU ARE SIMILAR TO **ME? THE ROLE OF SIMILARITY IN AFFECTIVE CONTAGION**

## Wróbel, M. & Królewiak, K.

The poster presents the results of two studies which sought to verify if similarity in personality traits (Study 1) and attitudes (Study 2) between a sender and a receiver of an affective state would influence affective contagion. We expected that the exposure to similar senders would lead to reactions congruent with their expressions, whereas the exposure to dissimilar senders would result in incongruent feelings. In order to evoke affective contagion we used short videos presenting a sender displaying positive vs. negative emotional expressions. We also manipulated similarity between the sender and the receiver with the use of software which generated short descriptions of the sender on the basis of participants' answers. Consequently, participants of both studies were randomly assigned to one of the following conditions: (1) a similar sender displaying positive expression; (2) a similar sender displaying negative expression; (3) a dissimilar sender displaying positive expression; (4) a dissimilar sender displaying negative expression. The results of both studies indicated that the exposure to the sender's positive and negative emotional expressions might lead to assimilation or contrast effects depending on the similarity between the sender and the receiver.
#### 28.03.2014, 09:00-10:00

#### Keynote III

### **ON THE DEFINITION OF EMOTIONS: A PROPOSED SOLUTION**

#### Reisenzein, R.

One of the perennial problems of emotion science is the definition of emotions. In my talk I propose the following solution to this problem. (1) One must distinguish between working and theoretical definitions of emotion. A theoretical definition of emotions can only be given in the context of an emotion theory and is an empirical hypothesis, as it stands and falls with the emotion theory on which it is based. (2) For meaningful research and theorizing on emotions, all that is needed is a working definition of emotions that allows to roughly demarcate the domain of investigation. Minimally, such a working definition is already provided by a list of paradigmatic examples of emotions; in more elaborated form, it also includes a list of uncontroversial features of emotion. (3) There is in fact widespread agreement on the working definition of emotions; therefore, the problem of emotion definition in the sense of "working definition" already has been solved. (4) The real controversy concerns the theoretical definition of emotions. However, because solving the theoretical definition problem presupposes the development of a reasonably correct emotion theory, it will be achieved at the end, rather than the beginning, of emotion research.

28.03.2014, 10:30-12:30

Paper Session 3.1: Morality And Empathy

## HOW PEOPLE'S EVERYDAY WORLDS FACILITATE EMOTIONS: CULTURAL PRACTICES, PRODUCTS, AND MEANINGS OF ANGER AND SHAME IN THE UNITED STATES AND BELGIUM

#### Boiger, M., De Deyne, S. & Mesquita, B

Three studies tested the idea that people's everyday worlds are structured in ways that promote and highlight emotions and emotional responses that are helpful in achieving central goals in their culture. Based on the idea that U.S. Americans strive for competitive individualism, while (Dutch-speaking) Belgians favor a more egalitarian variant of individualism, we predicted that anger and shame, as well as their associated responses, would be beneficial to different extents in these two cultural contexts. A questionnaire study found that cultural practices promote beneficial emotions (anger in the United States, shame in Belgium) and avoid harmful emotions (shame in the United States): Emotional interactions were perceived to occur more or less frequently to the extent that they elicited culturally beneficial or harmful emotions. Similarly, a content analysis of popular children's books from the United States and Belgium – a cultural product – revealed that children's books are more likely to portray culturally beneficial than culturally harmful emotions. Finally, a word association study of the cultural meanings associated with anger and shame provided commensurate evidence at the level of the emotional response. In each language network, anger and shame carried connotations that reflected the cultural significance of these emotions: While culturally beneficial emotions carried relatively stronger connotations of emotional yielding (e.g., giving in to anger and aggressing against the offender in the United States), culturally harmful emotions carried relatively stronger connotations of emotional containment (e.g., suppressing or transforming shame in the United States). Taken together, these findings underline not only the value of studying emotions in terms of the sociocultural contexts that produce them, but also highlight systematic cultural differences within two Western cultural contexts.

### **CLARIFYING THE ROLE OF AFFECT IN MORAL DILEMMA JUDGMENTS**

#### Conway, P. & Gawronski, B.

According to dual-process theories of moral judgment (e.g., Greene et al., 2001), responses to moral dilemmas are driven by two distinct psychological processes: affective processes are assumed to underlie tendencies to avoid harm (i.e., deontological responses), whereas cognitive processes are assumed to underlie tendencies to maximize the well-being of a greater number of people (i.e., utilitarian responses). Theoretically, both processes can contribute to overt judgments, but traditional methods equate overt judgments with underlying processes. To overcome this shortcoming, we adapted Jacoby's (1991) process dissociation (PD) procedure to independently quantify the strength of deontological and utilitarian inclinations within individuals. Five studies support the conclusion that deontological and utilitarian inclinations are dissociable, and that the former but not the latter are linked to affect. In Study 1, the two PD parameters were related to theoretically relevant individual-difference variables (e.g., the utilitarian parameter was uniquely related to need for cognition, whereas the deontology parameter was uniquely related to empathic concern and perspective-taking). Moreover, both parameters were positively related to moral identity—a relation that was obscured using overt moral judgments. In Study 2, a cognitive load manipulation selectively reduced utilitarian inclinations. In Study 3, a manipulation that increased the vividness of harm selectively increased deontological inclinations. In Study 4, participants scoring higher in Machiavellianism, psychopathy, and meaninglessness made more overt utilitarian judgments (replicating past findings), but PD revealed that this relation was due to decreased deontological, rather than increased utilitarian, inclinations among people high in antisocial personality traits. Study 5 demonstrated that the two PD parameters each correlated with different kinds of prosociality. Together, these findings support the utility of PD for clarifying the role of affect in moral judgments.

### TOWARDS A UNIVERSAL SCALE TO MEASURE SELF-REPORTED ODOR-RELATED FEELINGS.

#### Delplanque, S., Ferdenzi, C., Porcherot, C. & Cayeux, I.

Measuring self-reported affective feelings to odors and odorous products requires the development of suited instruments. This paper presents a line of studies aimed at developing Emotion and Odor Scales (EOSs) in several cultures. We present here EOSs developed for Switzerland, United Kingdom, Singapore, United States, Brazil and China. These scales, developed with 350-540 participants per country, have been conceived to allow the measurement of affective feelings (e.g., emotions, moods, attitudes) in response to a wide range of odors including pleasant and unpleasant, food and non-food ones. Several affective categories were recurrent in the countries Happiness/Well-being, examined here: Disgust/Irritation, Sensuality/Desire, Energy, but also Soothing/Peacefulness and Hunger/Thirst, indicating a potential link between emotion and adaptive universal functions of olfaction such as danger avoidance, ingestion and social communication. For these common categories, similarity in affective responses generally reflected geographic proximity indicating also a strong influence of cultural aspects. Exceptions to this pattern were Singapore and China, with affective responses of Singaporeans being closer to those of Europeans. This series of studies allows us to propose a universal scale (UniGEOS) that might be used in the future for examination of other cultures. This scale comprises affective categories that we found to be culturally shared, enclosing the most frequently shared affective terms, and several culture-specific aspects that may be relevant in other cultures. This tool can be used in its complete form (25 affective terms) or as a short version with nine categories entitled Unpleasant feelings, Happiness/Delight, Sensuality/Desire, Energy, Soothing/Peacefulness, Hunger/Thirst, Interest, Nostalgia and Spirituality.

### MORAL EMOTIONS IN DAILY LIFE

#### Hofmann, W., Skitka, L., Wisneski, D. & Brandt, M.

Moral psychology has drawn heavily on lab experiments using well-controlled, but artificial situations. To study moral emotions in everyday life, we conducted an experience sampling study to investigate how often people experience (i.e., witness directly; learn about) or commit moral or immoral acts in everyday life, the extent to which these events are accompagned by affective responses, and to what extent these experiences are moderated by individual differences in moral identity and moral conviction. Our affective indicators included eight moral emotions drawn from the literature on morality (e.g., guilt, disgust, gratitude), the intensity of moral self-worth (i.e., feeling that one is virtuous), the felt closeness (i.e., compassion) to the target of im(moral) acts, and emotional well-being. A heterogeneous sample of 354 adults were signaled 15 times over a three-day period, and furnished a total of 3,783 responses. We found that participants' moral affect, mood, and happiness were affected by moral events in expected directions. Specifically, committing, witnessing, and learning about moral deeds all mostly revolved around the moral emotions of gratitude and elevation. In contrast, committing an immoral act mostly centered around the self-conscious emotions of guilt and shame, whereas both witnessing and learning about an immoral act mostly revolved around the emotions of anger, disgust, and contempt. Moral self-worth was most strongly affected by committing moral versus immoral acts, as compared to just witnessing or learning about moral/immoral acts. Also, participants felt significantly less close to the targets of immoral rather than moral acts when these acts were witnessed directly rather than learned about or committed. Furthermore, moral acts were associated with an increase in emotional well-being above baseline whereas immoral acts were associated with a decrease in emotional well-being below baseline. Many of these effects were moderated in theoretically interesting ways by moral identity and moral conviction.

# MORE THAN COMPASSION: THE MODERATING ROLE OF EMPATHIZED EMOTION ON DIFFERENT

## **OUTCOMES OF EMPATHY**

#### Sassenrath, C. & Keller, J.

Emotional empathy, sometimes also termed compassion, has been shown to promote interpersonally beneficial behavior such as helping behavior (e.g., Batson, Chang, Orr, & Rowland, 2002) or a reduction in prejudice (e.g., Todd, Bodenhausen, Richeson, & Galinsky, 2011). Expressions of currently felt emotions not only inform about the current emotional state experienced by an individual but also affect the type of impression formed about the individual experiencing the emotion. Specifically, emotional expressions influence person perception because they allow for conclusions about how the individual experiencing the emotion has appraised an event or a situation finally resulting in the expressed emotion (e.g. Hareli & Hess, 2010; 2012).

Hence, the present research examines how emotional reactions to an event influence the effect of empathy on prejudice and helping behavior. Specifically, we varied the emotional reactions of a target and assessed empathic concern for the target (Studies 1 to 3), prejudice (Studies 1 and 2), or the inclination to help the target (Study 3). Given that others' emotional reactions influence how we perceive them, we expected that empathizing with a sad individual would increase empathic concern and thus decrease prejudice or increasing helping behavior, respectively. However, this should not be the case when empathizing with an angry or a disgusted individual. Results of three experiments reveal preliminary support for our predictions: Empathizing with a sad individual fostered empathic concern and this in turn reduced prejudice. However, empathizing with a disgusted or angry individual reduced empathic concern thereby increasing prejudice (Studies 1 and 2). Beyond that, in Study 3 empathy only fostered helping behavior when empathizing with sad but not when empathizing with angry or disgusted individuals.

Accordingly, the present research indicates that emotional reactions of individuals represent an important boundary condition for the effects of empathy on prejudice or prosocial tendencies.

# **OTHER-ORIENTED EMPATHY AND PERSONAL COSTS FOR HELPING: THE** MODERATING ROLE OF SIMILARITY PERCEPTIONS

### Siem, B. & Stürmer, S.

Ample empirical work demonstrates that feeling empathy for a needy individual increases helping. In the present research we proposed that one mechanism underlying the positive effect of empathy on helping is that empathic feelings reduce helpers' perceptions of their personal costs for helping. We further hypothesized that the costreducing effect of empathy is moderated by the perceived similarity between the helper and the recipient. To test these assumptions, we conducted two laboratory studies in which participants were presented with a fictitious needy other, each with a focus on a different form of similarity. In Study 1, we manipulated "personality similarity" by portraying the needy other as either similar or dissimilar to participants with regard to personal preferences, interests, and characteristics. Based on previous research suggesting that empathy only guides people's experiences and behavior when the other person is perceived as similar to the self, we expected that participants' empathic feelings lead to a reduction of the perceived personal costs for helping (which should serve as a mediator of the positive effect of empathy on helping) only when personality similarity is high. Results were in line with this moderated mediation model. In Study 2, we not only manipulated personality similarity, but also assessed whether or not participants themselves had ever experienced a similar plight as the needy person ("experience similarity"). Results indicated that, probably due to the strong self-focus resulting from remembering one's own past suffering, empathy was unrelated to costs for helping when experience similarity was high. When experience similarity was low, however, empathy had a negative effect on personal costs, but, as expected, only when personality similarity was high. In sum, these findings suggest that it is necessary to differentiate between different kinds of similarity perceptions when predicting empathy's potential to reduce the perceived personal costs for helping.

28.03.2014, 10:30-12:30

Paper Session 3.2: Group And Conflict

# BELIEF IN A CHANGING WORLD INDUCES HOPE AND PROMOTES PEACE IN **INTRACTABLE CONFLICTS**

#### Cohen-Chen, S., Crisp, R. & Halperin, E.

The importance of hope in promoting conciliatory attitudes has long been asserted in the field of conflict resolution. However, little is known about the conditions that induce hope, and how it leads to attitude change, especially in intractable conflicts where direct reference to the outgroup or conflict may trigger negative reactions. We tested the idea that hope regarding intractable conflict stems from a general perception of the world as dynamic and changing. Four studies yielded convergent support for this changing world hypothesis within the context of the Israeli-Palestinian conflict, using a range of different methodologies. In Study 1, an observational study, we coded Jewish Israeli interviewees discussing the conflict's future and observed associations between belief in a changing world, hope regarding the conflict, and support for concessions. Study 2 was a correlational study and revealed the hypothesized relations between self-reported belief in a changing world, hope, and support for concession-making. Study 3 established causality using an experimental manipulation. A narrative intervention, using a seemingly reliable news article, imparted upon participants that the world is dynamic and constantly changing (vs. unchanging and static). In Study 4 we developed a potential intervention based upon the changing world concept, in which participants depicted their association of a changing (vs. unchanging) world. Across studies, although the outgroup and specific conflict were never referred to, the belief in a changing world led to increased support for concessions through increased hope in the conflict's future. Theoretical and practical implications for promoting conciliatory attitudes critical for peace making are discussed.

## TO COME TOGETHER OR TO FALL APART: HUMILIATION AND AFFILIATION DURING **INITIATION RITUALS**

### Mann, L., Feddes, A., Doosje, B. & Fischer, A.

This research examines humiliation in the context of initiation rituals in fraternities and sororities. In this setting, degradation or hazing is often considered "part of the game" and it is justified by the argument that it strengthens bonds among initiates. Although agreeing to engage in such rituals may entail accepting a certain degree of hazing, we suspected that when actual humiliation is experienced, this has negative, rather than positive, consequences for group-bonding. Specifically, we hypothesized that experienced humiliation is negatively related to quality of contact with fellow initiates. In Study 1, respondents (N = 123) who experienced an initiation ritual in the past, filled in a questionnaire and described a humiliating event. As expected, the more respondents felt humiliated during their initiation, the lower they judged the quality of contact with fellow initiates at the time of the initiation. In Study 2 (N = 248), participants read vignettes describing initiation rituals. Results pointed to stronger perceptions of affiliation and social support and less humiliation when being hazed together with others than when being hazed alone. In Study 3 (N = 84), an initiation ritual was simulated in the lab. Again we found that being hazed with others leads to less humiliation than being hazed alone. Importantly, being hazed alone also led to stronger tendencies to hide and avoid others. Future studies should focus on the long-term effects of these avoidance tendencies, as they may hamper the intended outcomes of certain initiation practices in fraternities, sportclubs and the army.

## MOTIVATED EMOTING IN INTERGROUP CONTEXTS: EMOTIONAL PREFERENCES, **EMOTIONAL EXPERIENCES, AND POLITICAL DECISIONS IN INTRACTABLE** CONFLICT

#### Porat, R., Halperin, E. & Tamir, M.

Emotions in intractable conflicts typically arise in response to related events. They may also result from one's desired emotional state, namely, their a priori emotional preferences (i.e., the way they want to feel). To address this possibility, we examined what people want to feel in intractable conflicts and whether such a priori emotional preferences influence emotional reactions and political judgments. Studies 1 and 2 tested whether preferences to feel less anger and empathy towards outgroup members would subsequently result in less anger and empathy experience in response to a bogus political scenario related to the Israeli-Palestinian conflict. In Study 3, we left the laboratory and utilized a longitudinal field study design to assess the links between emotional preferences and subsequent emotional reactions in response to both positive and negative real conflict related-events (i.e., war and peace negotiations) and subsequent political judgments (i.e., conciliatory vs. militant tendencies). Finally, in Study 4 we tested the causal role of emotional preferences, particularly whether manipulated emotional preferences can influence subsequent emotional experiences and the political actions that follow. Our results have important theoretical and practical implications for both emotion regulation research and for the understanding of the dynamics of intergroup relations.

## EMOTION EXPRESSION DEPENDS ON THE AUDIENCE: PLAYING IT UP OR PLAYING IT **DOWN?**

#### Sasse, J., Spears, R. & Gordijn, E.

Group members experience and express emotions as and on behalf of the group. Especially when groups engage in conflict many emotions are involved, with respect both to experience and expression. But does emotion expression always reflect emotion experience or is emotion expression also used to achieve certain goals, implicating strategic considerations? Such goals could be to challenge the opponent group or to win the support of a third party and will therefore often differ depending on the audience. In a first study we investigated emotion expression towards different audiences in an intergroup conflict. Participants (N=86) learnt that their emotions would either be held confidential, communicated to the offensive out-group or to a third party (which held the power to address the conflict), or to both groups. Emotion expression in the confidential condition should reflect emotion experience (i.e., baseline), while the particular audiences may influence emotion expression in the other conditions. General findings revealed that the expression of emotions associated with help seeking, such as fear and sadness, was comparable for the baseline condition and the third party but reduced towards the out-group. A second study (N=83) complements these findings by assessing the intentions of emotion expression. Again participants communicated less help-seeking emotions to the out-group than in the baseline condition and to the third party. In line with this showing victimhood, asking for assistance and aiming to improve the group's position were communicated less when the out-group rather than the third party was addressed. Thus the two studies support the idea that emotion expression depends on the audience and implicates strategic considerations.

## EMOTION PRIMING WITH SPATIAL FREQUENCY FILTERED PRIMES UNDER MASKED AND UNMASKED PRESENTATION CONDITIONS

#### Rohr, M., Wentura, D.

A large body of evidence demonstrates that emotional stimuli can be processed very quickly, even under conditions of limited awareness. For a long time, it was assumed that such non-conscious processing is restricted to stimulus valence. Recent evidence (Rohr, Degner, & Wentura, 2012; Neumann, & Lozo, 2012), however, suggests that more differentiated processing can take place under such presentation conditions. To shed light on how the extraction of meaning at these early stages of information processing is achieved, we employed high and low spatial frequency information in two studies with an emotion priming paradigm. High and low spatial frequency information has been shown to contribute differently to the processing of emotional information (DeCesarei & Codispoti, 2013). There is evidence which suggests that the early stages of emotional information processing rely on low spatial frequency information, with the possibility that this processing takes place via a subcortical pathway (although this assumption is not undisputed). In our studies, high and low spatial frequency filtered emotional faces (i.e., happy, angry, fearful, sad) served as primes followed by unfiltered emotional target faces (i.e., happy, angry, fearful, sad). Participants' task was to categorize the target according to emotion. Under unmasked presentation conditions (with 100 ms prime duration), we observed emotion-specific congruency effects for all emotion categories. This pattern was found for both frequencies. Under masked presentation conditions (with 50 ms prime duration), we found, however, a dissociation: High-frequency primes only caused a valence priming effect (i.e., a differentiation between positive and negative emotions), whereas the pattern found with lowfrequency primes suggests a differentiation of low and high-arousing information within the negative domain. The implications of these findings will be discussed.

# FEAR OF THE OFFENDER AS A POSITIVE PREDICTOR OF PARTICIPATION IN VICTIM-**OFFENDER MEDIATION?**

### Zebel. S.

In the context of crime, victims may be fearful that the offender will again commit a crime against them, and/or experience strong feelings of anger towards the offender. Theories of restorative justice postulate that voluntary, victim-offender mediation (VOM) between victims and offenders after criminal acts may help both to cope with such events. Professional mediators supervise VOM, offering offenders the possibility to take responsibility and apologize. Victims can ask prudent questions and communicate the crime's consequences. Such communicative processes may reduce fear and anger among victims (e.g. Strang et al., 2006; Zebel, 2012). Little is known however about why victims voluntarily participate in VOM, and which role anger and fear play in this process.

On the one hand, the communicative processes during VOM may be appealing to victims who experience strong (rather than weak) anger and fear. On the other hand, based on the emotion literature, only anger but not fear should motivate participation: anger motivates to confront a wrongdoer, whereas fear stimulates withdrawal. In three studies, we examined the influence of anger and fear.

In the first two studies, Dutch participants (N = 290) imagined that they were victims of a burglary or robbery; crime severity was experimentally manipulated. Participants reported stronger fear (and anger) after severe crimes; fear predicted participants' willingness to participate in VOM positively. Unexpectedly, anger was not a positive predictor; in one study it appeared as a significant negative predictor.

In the third study, we approached actual crime victims (N = 105) who were contacted by a Dutch organization that organizes VOM. Victims reported their emotions during the preparation phase, at which point is was unclear whether they would participate. Controlling for crime type, victims who eventually participated in VOM reported stronger fear and weaker anger than those who did not. Possible implications are discussed.

### 28.03.2014, 10:30-12:30

#### Symposium 3.1

# PSYCHOPHYSIOLOGY AND PATHOLOGY OF EMOTION PERCEPTION AND PRODUCTION

Schacht, A., Baver, M., Recio, G., Künecke, J. & Kaltwasser, L.

Emotions play a key role in psychosocial processes from very early perceptive processes to behavioral consequences that determine our daily lives. Perceiving emotion in others correctly and controlling facial expressions to what is appropriate in different social contexts are important interpersonal abilities that rely on an intact emotional processing. We present new insights into the perception and production of emotion, from their early determinants to their consequences on personality and pathology. Event-related brain potentials (ERP) provide a strong tool for the investigation of very early effects during emotion perception and before emotion production. Facial electromyography (EMG) enables to measure explicit facial behavior and also incidental - and often invisible – facial reactions in the observer during the perception of emotional facial expressions. These incidental reactions might play a role in the understanding of emotions in others by a "reactivation" of the corresponding emotional state in the perceiver.

In the first talk Annekathrin Schacht will present a recent study that suggests that learned associations between behavioral outcomes and both pictorial and pseudo-linguistic stimuli can produce very early ERP emotion effects, even in the absence of biologically preparedness and semantic meaning. Subsequently, Mareike Bayer will present a study aimed to test the comparability of emotion effects across domains in ERPs to affective words, pictures and facial expressions. Her results suggest that words can produce similar affect-related ERP effects as pictures and facial expressions. Guillermo Recio will describe behavioral and ERP correlates of the executive control over facial expressions of anger and happiness. He will present the results from a study indicating similarities in the motor planning of the two expressions, but also differences in their inhibition and reprogramming costs. While the first three talks focused on neurophysiological correlates of processes underlying the perception and production of emotion, the following contributions consider consequences of these emotional processes in the social domain. Janina Künecke and colleagues investigate emotional abilities and incidental facial reactions to emotional stimuli with EMG in psychopathic offenders, non-psychopathic offenders and in a control group of male forensic employees. Based on previous research suggesting that psychopaths show a specific deficit in the perception of negative emotional expressions signalizing distress, they hypothesized decreased incidental facial reactions to negative emotional expressions in psychopaths in comparison to non-psychopathic controls. Finally, Laura Kaltwasser will present a study where emotional abilities are set in relation to prosocial behavior in standard socioeconomic dilemma. While analyses revealed an independence of general emotion recognition abilities and prosocial behavior, a model with emotion category specific factors suggests that more prosocial individuals show an enhanced ability to recognize emotional facial expression of sadness and fear.

In this symposium we examine emotion perception and production processes with respect to their determinants and consequences on psychophysiological as well as behavioral outcome levels. We highlight the necessity to question generality and specificity of emotion on all levels of analysis and stress implications of basic neurophysiological processes of emotion perception and production for relevant behavioral outcomes.

# EARLY EFFECTS OF EMOTION IN EVENT-RELATED BRAIN POTENTIALS (ERPS) ARE **BASED ON LEARNED ASSOCIATIONS**

### Schacht, A., Bayer, M. & Sommer, W.

Emotional pictures, faces, and words elicit an early posterior negativity (EPN) in the event-related potential, starting around 200-400 ms, followed by a late positive complex (LPC). Occasionally, also very early effects of emotion are seen prior to 200 ms. The present study examined whether these early effects are based on direct links established by reinforcement learning. In two experiments, participants learned to associate previously unknown Chinese words or (German) pseudowords, respectively, with monetary gain, loss, or neither. In delayed test sessions, they were required to distinguish the learned stimuli from novel distracters. Specific to stimuli associated with positive outcome early emotion effects, consisting of posterior positivities, appeared around 150 ms and LPCs between 550 and 700 ms, whereas an EPN was absent. These results indicate that emotion effects in ERPs may arise in the absence of biologically preparedness and semantic meaning.

## EVENT-RELATED BRAIN RESPONSES TO EMOTIONAL WORDS, PICTURES AND FACES: A CROSS-DOMAIN COMPARISON

### Bayer, M., Sommer, W. & Schacht, A.

Emotion effects in event-related potentials (ERPs) have previously been reported for a range of visual stimuli, including emotional words, pictures, and facial expressions. Furthermore, a number of previous reports suggested a reduced capability of emotional words to elicit such emotion effects, supposedly due to their symbolic nature. However, little data exists about the actual comparability of emotion effects within these stimulus classes. The present study aimed to fill this gap by investigating emotion effects in response to words, pictures and facial expressions using a fully randomized, within-subject design. Modulations of early posterior negativity (EPN) and late positive complex (LPC) were visible within all stimulus domains. However, stimulus domains showed clear differences in valence processing: while emotion effects were limited to positive stimuli for words, they were predominant for negative stimuli in pictures and facial expressions. These results suggest that words might not generally differ from pictures or facial expressions in their potential to elicit emotion effects in event related potentials.

# THE EXECUTIVE CONTROL IN THE PRODUCTION OF FACIAL EXPRESSIONS OF **EMOTION**

### Recio, G., Shmuilovich, O. & Sommer, W.

A successful social communication requires controlling and adapting facial expressions to what is appropriate according to social conventions. In many situations, individuals must suppress truly felt emotions, or conversely, pose a polite smile. This use of facial expressions is related with executive functions, a group of abilities necessary to maintain task-goals and regulate behavior, including planning how to achieve goals, the deliberate inhibition of responses, or the flexibility to quickly shift between tasks.

The present study investigated behavioral and ERP correlates of planning, inhibition, and shifting abilities for facial expressions of anger and happiness with a response-priming task. Results showed a cost in reaction time when participants prepared one expression but then had to switch and produce the other one, and this cost was largest switching from anger to happiness. On the neurophysiological level, ERP data did not clearly indicate differences in the motor planning of the two expressions, but a greater inhibition (reflected in the N2 component) and less efficient allocation of attentional resources (P3) when reprogramming from anger to happiness.

## EMOTION PROCESSING IN PSYCHOPATHY: EVIDENCE FROM FACIAL EMG DURING **EMOTION PERCEPTION**

### Künecke, J., Olderbak, S., Wilhelm, O., Mokros, A. & Nietschke, J.

The identification of facial expressions of emotion is an important interpersonal ability. Perceiving the emotional facial expressions of others often elicits corresponding facial reactions in the observer, which are incidental and often invisible, but are measurable by electromyography (EMG). According to embodied simulation theories these rapid facial reactions foster understanding of emotions in others by a "reactivation" of the corresponding emotional state in the perceiver. Psychopaths show specific deficits in the perception of negative emotional expressions such as fear and sadness. Arguably, these (and other) deficits result from an amygdala dysfunction which is associated with a decreased autonomic response to aversive stimuli. Evidence on these incidental facial reactions to emotional stimuli in psychopathy is limited. In an ongoing multi-center study in forensic institutions we tested psychopathic offenders, non-psychopathic offenders and male forensic employees on emotion perception and classification tasks during EMG recording. We hypothesize decreased incidental facial reactions to negative emotional expressions in psychopaths in comparison to non-psychopathic controls. The amount of facial EMG in response to negative emotions is expected to be negatively correlated with psychopathy. Further, we expect emotion-specific relations between facial reactions and ability measures of emotion perception will vary between groups. First results will be presented and discussed in this talk. This will provide further insight into the pathology of emotional processing in psychopathic offenders.

### ON THE RELATIONSHIP OF EMOTIONAL ABILITIES AND PROSOCIAL BEHAVIOR

#### Kaltwasser, L., Hildebrandt, A., Wilhelm, O &, Sommer, W.

The ability to process facial expressions of emotions has been considered a critical component of emotional intelligence that is essential for successful social functioning: Longitudinal data suggests that the ability to detect and label emotion cues facilitates positive social interactions and the recognition, but also expression, of (particular) emotions enables prosocial behavior in everyday situations. Thus emotional expressivity has been established as a reliable signal of cooperative tendency. We measured the accuracy of emotion recognition and cooperative behavior in standard economic games (Prisoner's Dilemma – PD, Dictator & Response Games). In a multivariate approach with structural equation modeling we investigated the relation between the ability to recognize emotions and prosocial behavior on the level of latent constructs. Furthermore, we videotaped participants during PD to determine their degree of spontaneous emotional display with regard to feedback of cooperation or defection by their co-player. Analyses revealed no significant relationship between general emotion recognition measured across emotion categories and prosocial behavior. However, by modeling emotion category specific factors, results suggest that more prosocial individuals show an enhanced ability to recognize emotional facial expression of sadness and fear and express less anger during social interaction. The findings will be discussed with regard to theoretical models of empathy and the concern mechanism.

### 28.03.2014, 10:30-12:30

#### Symposium 3.2

### THE INTERACTION BETWEEN NORMS AND EMOTIONS ACROSS CULTURES

#### De Leersnyder, J., Stamkou, E., Van Osch, Y., Hareli, S. & Heerdink, M.

It is long known that there are cultural differences in both the experience and expression of emotion. However, researchers are only beginning to uncover how exactly culture and emotion are intertwined. On the one hand, research suggests that culture shapes emotional experience and expression through the norms embedded in the culture. On the other hand, social norms may be inferred from emotional expressions in a situation as well, suggesting that observing emotions may be a means for acculturation. These findings suggest a bi-directional relation between culture and emotion, and ask for a better understanding of the various connections between emotion, culture, and social norms. Thus, the aim of this symposium is to bring together different approaches to studying the interaction between culture, norms, and emotion. More specifically, the symposium covers the following three aspects of this interaction: 1) the effect of culture on emotional experience through its effect on the construal and appraisal of norm violating behavior; 2) the effect of culture on emotional expression through the social norms that govern the expression of emotion across situations; and 3) the learning of social norms through observing emotional interactions.

The symposium includes both cross-cultural research and experimental research, and covers both intrapersonal and interpersonal perspectives on emotion. In a first paper, Jozefien De Leersnyder shows that a culture's relative emphasis on autonomy versus relatedness shapes the interpretation of ambiguous social situations in these terms, and determines the strength and type of (moral) emotional reaction following a violation of these norms. Also focusing on how culture shapes emotional reactions to a situation, the second paper by Eftychia Stamkou focuses on the cultural dimension of Tightness. She shows in a large cross-cultural sample that cultural Tightness, along with personal differences, may explain cultural differences in emotional reactions to norm violations. In the third paper, Yvette van Osch shows that cross-cultural differences in the expression of pride may not reflect differences in the experience of pride, but rather differences in context-sensitivity across cultures. She finds that people with a Chinese cultural background express more pride in an intergroup context than in an intragroup context, and that this difference is absent in people from Dutch and American cultures. The fourth paper, by Shlomo Hareli, takes an appraisal perspective to explain the inference of norms through observing emotional interactions, and shows that observing a group expressing anger in response a norm transgression leads to a higher percentage of people who inferred the norm correctly than expressed sadness or emotional neutrality. Finally, the fifth paper by Marc Heerdink also focuses on inferring norms from emotional expression, but focuses on the moral connotation of the emotions expressed in response to behavior to explain why expressions of disgust lead to a relatively stronger inference about what is approved of in a group, whereas expressions of anger lead to relatively stronger inferences about what is disapproved of in a group.

These talks include not only large cross-cultural survey studies investigating how different cultural norms affect emotional experience and expression, but also experimental studies about the ways in which emotions feed back into group norms and culture. As such, the symposium offers a very diverse and complementary perspective on these questions. Recurring themes, such as the different dimensions underlying cultural differences in emotional experience and expression, and the connections to morality and moral emotions that are apparent in some of the papers, suggest potential starting points for further integration of these different findings. Thus, through presenting these potentially complementary perspectives, the aim of this symposium is to gain a better understanding of the reciprocal links between norms and emotions across cultures and stimulating much-needed theoretical integration.

# **CONCERNED ABOUT AUTONOMY, RELATEDNESS OR BOTH? HOW BELGIAN AND** TURKISH NORMS SHAPE TURKISH-BELGIANS' EMOTIONS DURING SOCIAL INTERACTIONS.

### De Leersnyder, J. & Mesquita, B.

Different cultural contexts are characterized by different norms: Whereas most Western cultural contexts (e.g., Belgium) promote 'autonomy', most non-Western cultures (e.g., Turkey), promote 'relatedness'. We expect that these central norms shape emotional experience as they may guide people's appraisals of interpersonal events. First, people's emotional experiences are expected to be stronger when central norms (Autonomy in Belgium; Relatedness in Turkey) are violated than when less central ones are violated (H1). Second, the nature of people's emotional experiences is expected to differ depending on which norm is violated (Anger as reaction to Autonomyviolations; Contempt as reaction to Relatedness-violations; Rozin, Lowry, Imada, & Haidt, 1999; H2). Finally, when norm-violations are ambiguous, we expect that the salient cultural norms will determine the interpretation and thus which emotions occur (H3).

In Study 1 we investigated the emotional experiences of Belgian and Turkish high school students (n = 67) in response to vignettes in which a classmate violated the norms. Vignettes were based on previous research and were selected to represent violations of autonomy, relatedness, or both. For each vignette, students reported the intensity of a range of emotions, including anger and contempt emotions. The results supported all three of our hypotheses.

Study 2 was a social experiment in which 57 Turkish-Belgian participants interacted with a confederate who followed a script to violate the different norms. We primed the centrality of cultural norms by priming culture: For half of the Turkish-Belgian participants the interaction took place in a Belgian social context; for the other half it took place in a Turkish social context. Self-report measures of participants' emotions as well as objective coding of their emotional expressions revealed differences in emotions between the two cultural contexts that were consistent with our expectations. Cultural norms may thus importantly shape social interactions through the emotions people experience.

## HOW DO EMOTIONAL REACTIONS TO NORM VIOLATIONS DIFFER ACROSS **CULTURES?**

### Stamkou, E., Van Kleef, G., Homan, A. & Gelfand, M.

Norms are rules that guide and constrain behavior without the force of laws. If norms function as beneficent control mechanisms that keep anarchy at bay, then violating the norms should have negative consequences for the norm violator. Paradoxically, empirical research indicates that individuals who violate prevailing norms are perceived as more powerful than those who stick to the rules (Van Kleef, Homan, Finkenauer, Gundemir, & Stamkou, 2011). Recent evidence from our lab, however, shows that the link from norm violation to power varies across cultures.

In the present study we investigated the role of perceivers' emotional reactions to norm violators in this process. Participants in 19 cultures (Netherlands, East Germany, West Germany, USA, Austria, Poland, Israel, Pakistan, Saudi Arabia, Taiwan, Greece, Portugal, Singapore, UK, Romania, France, Turkey, Japan, and Zambia) read a scenario about an employee who either violated or followed certain organizational unwritten rules (e.g., timely arrival to a meeting, talking out of turn). Participants then reported on the emotions they experienced regarding the employee's behavior (anger, shame, contempt, pride, and admiration). We also estimated participants' attitudes and behavior towards social norms as well as cultural syndromes.

Results showed that individuals' emotional reactions to a person's norm violating or norm adhering behavior varies widely across different cultures. Notably, individuals' emotional reactions are accounted for by both personality syndromes (e.g., Dutifulness, which is individuals' dispositional tendency to follow rules) and cultural syndromes (e.g., Tightness, which is a culture's tolerance of rule breaking behavior). The current findings have important implications for processes of norm changing across cultures.

### CONTEXT SENSITIVITY OF THE PRIDE EXPRESSION

#### Van Osch, Y., Breugelmans, S., Zeelenberg, M.

Pride is thought of as one of the most culturally variant emotions. Asians are said to not express their pride as intensely as Westerners do. However, evidence for this claim is scant and sometimes solely based on broad theories on cross-cultural differences in emotion (e.g., Markus & Kitayama, 1991). In several projects we have investigated whether the expression of pride is sensitive to culture. First of all, data from 23 countries (part of the GRID project (Scherer, Fontaine, & Soriano, 2013) revealed that the variation in the meaning of pride was limited to the expression of pride (i.e., differences were absent for the experiential phenomenology of pride), and sometimes differences between samples were related to national differences in power distance (Van Osch, Breugelmans, Zeelenberg, & Fontaine, in 2013). Secondly, employing archival photographic data from Chinese and American athletes revealed that they are perceived to express pride equally intense after winning gold medals, but that the intensity of the expression depends on the social context. Chinese are perceived to express their pride more intensely after defeating an outgroup member, but moderate their pride expression when they have outperformed an ingroup member. Americans did not distinguish between these social contexts when expressing pride (6 studies). Finally, data from Chinese-Dutch biculturals primed with a Dutch social context experience and intend to express pride to the same extent as Dutch mainstreamers do. However, Chinese-Dutch in a Chinese social context moderate their pride expression, but do experience pride in the same way. This means that cross-cultural differences in the expression of pride are context-dependent.

## EMOTIONS AS SIGNALS OF NORMATIVE CONDUCT

#### Hareli, S.

Social interactions are heavily norm-based and these norms need to be learned. For this, the emotional reactions of other's in response to a norm transgression can serve as signals. This talk presents the results of a study in which it was found that when a group responds with anger to a norm transgressing behavior, participants are better able to correctly infer the norm than when the group responds with sadness or emotional neutrality. A process-model shows that this inference is based on the participants' understanding of the groups' appraisals of the behavior. That is, participants who were able to reverse engineer the underlying appraisal of norm-incompatibility from the emotion expressions inferred the norm more readily. Humans as a social species, require efficient means to quickly adapt to new situations and to perform flawlessly in social contexts. Emotion information is one of the instruments that can be used in this quest.

### LEARNING ABOUT NORMS BY OBSERVING (MORAL) EMOTIONAL INTERACTIONS

### Heerdink, M., Koning, L. & Van Kleef, G.

Through their intimate connection to moral values, expressions of moral emotions may reflect that a society or culture construes the eliciting events in moral terms. Thus, observing an interaction in which a behavior is followed by the expression of a moral emotion can inform observers about the group's moral judgment of this behavior. Moreover, since different moral emotions are linked to different moral values, the type and content of the norm that is inferred from the situation is likely to be emotion-specific. Three studies show that observing expressions of two different negative moral emotions, anger and disgust, in response to a behavior, influences the relative strength of inferred injunctive and 'ideal' (what is approved of; Codol, 1975) norms against this behavior. These inferences are made through their respective association with the moral values of autonomy and purity (Rozin, Lowery, Imada & Haidt, 1999). Moreover, these studies show that these inferences depend on the extent to which a group identity is salient in the situation. In Study 1, a stronger norm against using sugar in coffee is inferred if the group member expressing disgust is a prototypical group member, compared to a peripheral member. Study 2 contrasts expressions of anger and disgust about smoking marihuana, and shows that anger leads to a relatively stronger injunctive norm, whereas disgust leads to a relatively stronger ideal norm, and this is only found for prototypical expressers. Finally, Study 3 shows that anger and disgust differentially affect moral concerns and norm inferences if they are accompanied by a general statement ("You shouldn't do that"), but not by a personal statement ("I don't want you to do that"). Together, these studies show that expressed moral emotions may be considered a device for acculturation, as they teach observers what is approved of, and what is disapproved of by groups.

28.03.2014, 10:30-12:30

Symposium 3.3

## IN THE FACE OF THREAT

Wieser, M., Vanderhasselt, M., Centifanti, L &, Eisenbarth, H.

Social interactions can include positive as well as negative information, that's why recognition of facial expressions and use of own facial expressions is highly relevant for these situations. A socially or otherwise threatening situation is one, in which the perception of emotion in others' facial expressions has an important role to identify potential negative outcomes and to initiate regulating behavior. Thus, facial expressions play an important role on both sides, the sender and the receiver in a communication. This symposium discusses situations of potential social threat and the relationship of emotional facial expressions with the environment and consequences, from both perspectives, from the one of the sender and of the receiver.

Matthias Wieser will present data on the influence of environmental information on the perception of emotion in facial expressions throughout several studies using EEG. Marie-Anne Van der Hasselt will show recent data on the influence of providing self-relevant evaluations on pupil dilation and the relevance of emotion regulation traits on this relationship.

After these two more basic emotion processing topics, Luna C.M. Centifanti moves over to the pathological aspects of emotional facial expressions in the context of threat. Her data will provide first evidence of the relevance of own situational fear for the perception of fear in others in the context of callous unemotional traits. In the last part, Hedwig Eisenbarth will provide evidence for the relevance of the early processes of processing emotional facial expressions, based on several studies in psychopathic individuals, especially when it comes to facial expressions displaying negative valence expressions.

All in all, this symposium should point out different aspects of reactions to threatening situations, in studies using different behavioral and physiological data as well as investigating these processes in healthy participants and clinical populations known for a poor emotion decoding capacity. The four speakers are from four different countries and female speakers are well represented in the speakers line-up.

# **CONTEXT COUNTS IN LARGE AMOUNTS: - THE INFLUENCE OF THREATENING** CONTEXT VARIABLES ON THE PERCEPTION AND NEURAL PROCESSING OF FACES

### Wieser, M.

Perception of facial expressions is typically investigated by presenting isolated face stimuli. In everyday life, however, faces are rarely seen context-less. Contextual information influencing face processing may stem from different sources, for example from verbal information or surrounding visual contexts. In the present talk, I will present studies showing that threatening self-relevant verbal information alters the perception and evaluation of neutral faces. Furthermore, data will be presented on how fearful facial expressions and gaze direction interact with threatening visual contexts. In two studies we manipulated the context in which neutral faces were presented by giving the participants verbal information about the face shortly before the actual presentation of the face. In an fMRI paradigm it was found that especially self-relevant negatively contextualized faces showed enhanced neural activity in MPFC and FFA areas. In a subsequent ERP study it was demonstrated that self-relevance led to differential processing of neutral faces at earlier and late stages of visual processing. These results support the view that contextual information influences face perception on a cortical level and seems to constitute potent means to change the visual salience of a neutral face. In further experiments using steady-state visual evoked potentials (ssVEP) to examine the mutual effects of facial expressions, gaze direction, and visual context, we were able to demonstrate that when fearful facial expressions were shown, threatening background visual scenes elicited larger electrocortical responses compared to other backgrounds. In a second experiment it was found that cortical processing of fearful faces with averted compared to direct gaze was enhanced only when unpleasant context scenes were presented. These findings point at a complex interplay between facial expressions, gaze direction, and context on visual perception. Taken together, the results from the presented studies further challenge the assumption of hardwired categorical emotion extraction, and suggest that efficient emotion perception is not solely driven by the structural features present in a face, but massively influenced by especially threatening contexts.

### THE TEMPORAL DYNAMICS OF EMOTIONS: THE ROLE OF EMOTION ANTICIPATION

### Vanderhasselt, M., Remue, J., Mueller, S &, De Raedt, R.

Emotions can occur during an emotion eliciting event, but they can also arise when anticipating the event. We used pupillary responses, as a measure of effortful cognitive processing, to test whether the anticipation of an emotional stimulus (positive and negative) influences the subsequent online processing of that emotional stimulus. Moreover, we tested whether individual differences in the habitual use of emotion regulation strategies are associated with pupillary responses during the anticipation and/or online processing of this emotional stimulus. First, our results show that, both for positive and negative stimuli, pupillary diameter during the anticipation of emotion eliciting events is inversely correlated to the pupillary response during the emotional picture presentation. These individual differences in the temporal interplay between anticipation and online processing of emotional events are found to be associated to habitual tendencies in cognitive reappraisal to r egulate emotions in daily life. High reappraisal scores predicted enhanced pupillary responses during the anticipation and subsequent smaller pupillary responses during the online processing of emotion eliciting events (the opposite was observed for low reappraisal scores). Possibly, based on the functional roles of activation in the dorsolateral prefrontal cortex (e.g., attentional set, cognitive control and emotion regulation), larger pupillary responses during the anticipation of an emotional stimulus refers to sustained attentional set activation to prepare for an upcoming emotional context. This enhanced preparation might subsequently lead to a reduced need to process emotional stimuli when being confronted with them, which might indicate relatively less effort over time to cope with the emotional stimulus. This association between anticipation and online processing is most strongly for habitual reappraisers. Because the habitual use of reappraisal is known to have a posi tive inf luence on emotional well-being, the interplay between anticipation and online processing of emotional stimuli might be a significant marker of this well-being.

# MAPPING THE AUTONOMIC SPACE: CARDIOVASCULAR PSYCHOPHYSIOLOGY, EMOTION RECOGNITION. AND CALLOUS-UNEMOTIONAL TRAITS IN BOYS

### Centifanti, L

Certain characteristics seem to predict a severe pattern of antisocial behaviour, such as callously disregarding other people's values, failing to care about performance within society rules, and being disingenuous in their feelings the collection of behaviours are termed callous-unemotional (CU) traits. Prior research finds that the underlying difficulties for these youths are of an emotional nature; youths with high levels of CU traits lack the fear that typically-developing youths feel when they do something wrong and this may stem from a general lack of fear. Thus, a lack of fear could explain the conduct problem behaviour of youths with CU traits (Blair, 2001). Recently, recognition of fear displays in other people's faces has been examined. Indeed, being able to recognize fear displays in other people's faces well has been related to greater pro-social behaviour (Marsh, Kozak, & Ambady, 2007), and a deficit in fear recognition has been related to CU traits and antisocial behaviour (Muñoz, 2009). A novel idea to test directly with psychophysiology is whether the ability to recognize fear in others may be based in personal experience of fear. That is, it is possible that one comes to understand fear displays by having personal experiences of fear, yet youths with high levels of CU traits may lack the roots of understanding others' emotional

28 displays. The next question is how fearlessness and fear recognition underlie conduct problems. Is it possible that lacking fear hinders the recognition of fear in others and therefore conduct problems are the result? Because bodily reactions may be unknown to the person experiencing them, physiological measures were taken. Indeed, Neurobiological assessments may be the future of forensic/clinical assessment (Popma & Raine, 2006; Bradshaw et al., 2012). Although research shows that CU traits relate to low sympathetic reactivity, parasympathetic activity may also aid in assessment of CU. Indeed, respiratory sinus arrhythmia (RSA; indexes parasympathetic activity) relates to emotion regulation tasks. A community sample was recruited using two-step stratified sampling technique, selecting the bottom and top 20% of males on self-reported CU. Participants (N=35) and their parents were followed up with a laboratory assessment. Participants watched two 3D rollercoaster simulations and a control video. Participants self-reported arousal and valence and cardiovascular psychophysiological measures were taken. The participants' parent(s) completed measures of CU and conduct problems. Finally, participants completed an emotion-recognition task. The results showed the high CU group reported less arousal to the rollercoaster than the low CU group. Conduct problems was also associated with less self-reported arousal. Psychophysiological measures did not differentiate groups. Instead, conduct problems were associated with poor recognition of sad faces, but only for the high CU group. This may indicate that recognition of distress plays a part in conduct problem behaviour while arousal may be less prominent for those high on CU traits. However, greater RSA was related to better recognition of sad faces for the low CU group only. Thus, in the low CU group, better emotion regulation may explain better emotional understanding with regard to distress.

# EMOTIONAL FACIAL EXPRESSIONS IN THE THREATENING EYE: BEHAVIORAL AND PHYSIOLOGICAL REACTIONS OF PSYCHOPATHIC INDIVIDUALS

### Eisenbarth, H.

The perception of facial expressions has two aspects: perceiving emotion in others and reflecting emotion towards others. The psychopathic personality is an interesting model for these mechanisms, as the basic reactions to emotional content is reduced, but interpersonal interaction works quiet well. The model of psychopathy thereby helps with understanding In a series of studies, this interesting interaction has been shown: psychopathic individuals only show deficits in categorizing negative facial expressions if the task gets difficult, but they show deviated gaze while searching for and watching emotional facial expressions and they also show differences in ERPs while watching facial expressions with negative emotional affect. However, there are no differences in facial reactions to emotional facial expressions or scenes.

These results point to a reduced reactivity to potential threatening situations in psychopaths, which is helpful for understanding the basic interaction of approach vs. avoidance and emotion decoding.

### 28.03.2014, 12:30-14:00

### Poster Session III

# 1. ORAL VS. WRITTEN EMOTIONAL DISCLOSURE: DIFFERENCES IN AFFECTIVE AND **COGNITIVE CONTENT**

#### Balon, S. & Rimé, B.

So far, emotional disclosure has been widely investigated through the study of 'social sharing of emotion' (Rimé, Mesquita, Philippot & Boca, 1991) which focuses on face-to-face interactions and through the development of the 'writing paradigm' (Pennebaker & Beall, 1986) whose basic procedure consists of several writing sessions. Yet, no research has examined the content differences between those two modalities. In a first study, 92 student participants (M = 19.46 years; SD = 1.63) were invited either to speak or to write about a personal emotional event. In a second one, 112 student participants (M = 20.29 years; SD = 1.24) were asked to watch an emotion-inducing film. They were then invited to disclose their emotions by means of one of our 4 experimental conditions: (1) talking alone to a microphone, (2) talking with an unknown partner (another student), (3) talking with a close one (friends, relatives, etc.), or (4) writing. Lexical analyses were conducted on all data collected with a computerized text analysis tool for French language: the Linguistic Inquiry and Word Count (LIWC; Piolat, Booth, Chung, Davids & Pennebaker, 2011). Contrary to common assumptions, the percentage of emotional terms was significantly higher in writing, compared to oral conditions. More specifically, it appeared that writing was associated to a greater amount of negative terms compared to speaking to an unknown partner where participants seemed to be willing to still use a certain amount of positive emotion terms. Finally, writing also appeared to contain more insight words (realise, understand, etc.) compared to the social sharing condition. Our two studies consistently highlighted many differences between oral and written disclosure. These results could be explained by the inherent characteristics of writing/speaking and could be further differentiated in light of the presence and kind of social audience set up in our various oral conditions.

# 2. WHEN THE MASK 'FALLS': THE ROLE OF FACIAL MUSCLE RESONANCE IN MEMORY FOR EMOTIONAL LANGUAGE

### Baumeister, J., Rumiati, R. & Foroni, F.

According to the theories of embodied cognition, the processing of emotional content strongly relies on a reexperience of the emotional information in oneself (embodied simulations), which, amongst other bodily reactions, is reflected in spontaneous facial expressions that occur in accordance to the relevant emotion. For instance, recognizing and interpreting emotional information (e.g., about happiness) involves spontaneous facial expressions of happiness. No research, so far, has investigated whether embodied simulations play any role beyond initial processing / recognition. In the present study we test whether embodied simulations (during encoding and/or retrieval) play a role in memory for emotional material helping memory retrieval of emotional information. Eighty participants underwent a memory task involving emotional and neutral words consisting of an encoding and retrieval phase. Depending on the experimental condition, facial muscles were blocked by a hardening facial mask either during encoding, or during retrieval, or during both encoding and retrieval, or never (control). Results show, that memory for emotional words significantly decreased if embodiment was blocked at either point in time during the experiment (during encoding, retrieval or during both) in comparison to the control group (i.e., no blocking during the experiment). In summary, embodied simulations play a crucial role also in memory retrieval, in line with what embodied theories of emotion processing would suggest.

# 3. DOES AFFECT REACTIVITY TO UPLIFTS CO-OCCUR WITH AFFECT REACTIVITY TO HASSLES? TESTING THE DIFFERENTIAL SUSCEPTIBILITY HYPOTHESIS AND ASSOCIATIONS WITH NEUROTICISM FACETS IN DAILY LIFE

### Bennik, E., Bastiaansen, J., Ormel, J &, Oldehinkel, A.

The traditional diathesis stress model focuses primarily on negative environmental influences in the development of psychopathology. The more recent differential susceptibility theory emphasizes generalized sensitivity to both positive and negative environmental influences, in that individuals who are highly reactive to negative environmental influences also benefit more from positive environmental influences (i.e. reactivity 'for better and worse'). By ecological momentary assessments (14 days x 5 measurements a day) in 71 female participants and the use of individual affect reactivity profile analysis, the current study provided an ecologically valid assessment of affect reactivity to both uplifts and hassles while also examining what individual affect reactivity profiles are reflected by neuroticism. We found a significant but small positive correlation between affect reactivity to hassles and to uplifts. Neuroticism significantly predicted a better and worse profile, which was most largely driven by the depression facet. Our results underline the presence of individual differences in affect reactivity to uplifts and hassles, and their relation to different aspects of neuroticism, a strong marker of vulnerability to distinct forms of psychopathology. Future research elucidating the mechanisms by which affect reactivity impacts psychopathology will benefit from (1) an investigation of affect reactivity to both uplifts and hassles and (2) an individual profile approach based on ecological momentary assessments.

### 4. DOES EMOTION DRIVE ATTENTION? EVIDENCE FROM INHIBITION OF RETURN.

Berdica, E., Gerdes, A., Pittig, A. & Alpers, G.

Inhibition of return (IOR) refers to a bias against returning the attention to a previously attended location. As a foraging facilitator it is thought to facilitate systematic visual search. In contrast, cognitive theories suggest a hypervigilance towards threatening cues and difficulty for anxious individuals to disengage attention from threat. Combining these two theories, in this experiment the influence of spider fear on the IOR effect was investigated. Fifty participants completed an inhibition of return task including schematic representations of spiders and butterflies as targets and a dot as cue. Eye movements were recorded while participants had to discriminate if the target was a spider or a butterfly. Afterwards they rated the pictures according to their valence and arousal. Reaction time data did not reveal a significant IOR effect but a significant interaction of group and target; spider fearful participants were faster to detect spider targets than butterfly targets. Furthermore, eye-tracking data showed a robust IOR effect independent from the relevance of the stimuli used in the experiment. Interestingly, either outcome is a meaningful contribution to the literature and will help understand the boundary conditions of well documented attentional processes and the way they are affected by emotions such as fear.

## 5. EMOTIONAL CORRELATES OF POLITICAL IDEOLOGY: DIFFERENCES IN DISGUST **SENSITIVITY**

#### Carraro, L., Castelli, L. & Negri, P.

Within political psychology there is a vibrant interest toward the differences between conservatives and liberals, such as differences in personality profiles, cognitive styles, musical and artistic preferences (e.g., Jost et al., 2003). More relevant here, recent studies found differences in the reaction to negative stimuli: conservatives (vs. liberals) display more intense physiological reactions (e.g., skin conductance) to threatening information (Oxley et al., 2008). Moreover, their attention seems to be automatically grabbed by negative vs. positive stimuli (Carraro et al., 2011). Finally, research has described conservatives as higher in disgust sensitivity (e.g., Inbar et al., 2008). The main aim of the current work is to further investigate both controlled and automatic reactions of conservatives and liberals to disgust. Indeed, in Study 1 in a pencil and paper questionnaire (FEE/QADS, Schienle, 2002) conservatives reported more disgust sensitivity as compared to liberals. Subsequently, in Study 2 (Implicit Approach Avoidance Task; Paladino & Castelli, 2008) and Study 3 (Mouse Tracker; Freeman & Ambady, 2010) automatic reactions toward images that may elicit disgust has been analysed. Overall, results indicated that conservatives (vs. liberals) were slower in response to disgusting (vs. neutral) images because their automatic attention was selectively attracted by negative stimuli. More interestingly, conservatives emerged to be slower in approaching disgusting images and faster in avoiding such stimuli (Study 2); moreover, in the mouse-tracking task (Study 3) they described smaller and straight trajectories with the hand movements. Finally, Study 4 analysed automatic reactions toward faces expressing either positive (i.e., happiness) or negative (i.e., disgust) emotions, with an Emotional Stroop Task (Pratto & John, 1991). Results indicated again that conservatives (vs. liberals) were slower in response to negative (vs. positive) emotions. In conclusion, the present work indicates that conservatives and liberals show different explicit and automatic reactions to disgusting stimuli, with conservatives prioritizing negative information.

# 6. APPROACHING AVOIDANCE: A DISTINCTION BETWEEN DISGUST- AND FEAR-**RELATED COGNITIVE MECHANISMS.**

### Chainho, A. & Van Hooff, H.

It has been recently proposed that not only fear, but also disgust, has a substantial contribution to the emotional appraisal of threat. However, it remains unclear whether these two negative emotions trigger similar or distinct cognitive mechanisms. The current study investigated whether disgust information produces early attentional capture, like fear, or that it modulates later processes of affective appraisal. Event-related potentials (ERPs) were recorded during a dot-probe task, primed with affective words, to tests these two hypotheses. Electrophysiological measures showed bigger P2 amplitudes for fearful pictures that were primed with fearful words, but the same was not observed for disgust or neutral pictures. Instead, significantly smaller P3 amplitudes were observed exclusively for disgust pictures that were primed with disgust and neutral words. These results suggest that threating information that elicits disgust is distinctively processed in an avoidant manner, with no particular effect on early attentional processes.

# 7. MOTIVATED EMPATHY: THE MECHANICS OF THE EMPATHIC GAZE

### Cowan, D., Vanman, E. & Nielsen, M.

Successful human social interactions frequently rely on appropriate interpersonal empathy and eye contact. Here we report a previously unseen relationship between trait empathy and eye-gaze patterns to affective facial features in video based stimuli. Fifty-nine healthy adult participants had their eyes tracked while watching a three-minute long 'sad' and 'emotionally neutral' video. The video stimuli portrayed the head and shoulders of the same actor recounting a fictional personal event. Analyses revealed that the greater participants' trait emotional empathy, the more they fixated on the eye-region of the actor, regardless of the emotional valence of the video stimuli. Our findings provide the first empirical evidence of a relationship between empathic capacity and eye-gaze pattern to the most affective facial region (eyes).

## 8. NARCISSISM AND EMOTIONAL CONTAGION: DO GRANDIOSE AND VULNERABLE FORMS OF NARCISSISM DIFFER IN SUSCEPTIBILITY TO "CATCHING" THE EMOTIONS **OF OTHERS?**

### Czarna, A., Wróbel, M. & Zeigler-Hill, V.

The present research investigated the relations of grandiose and vulnerable narcissism with susceptibility to emotional contagion using a self-report measure (Emotional Contagion Scale) and an experimental test (N = 101). The results indicated that the two types of narcissism were oppositely related to self-reported susceptibility to emotional contagion. Grandiose narcissism predicted high self-reported susceptibility to contagion with positive emotions, while vulnerable narcissism predicted high susceptibility to negative emotional contagion. Experimental results showed that grandiose narcissism was related to high mood and relative impermeability to other people's emotions. Only those low on grandiose narcissism proved sensitive to contagion with positive emotions. Vulnerable narcissism was associated with stable low mood. Comparison of self-report with experimental findings revealed low accuracy of narcissists'self-views regarding their susceptibility to emotional contagion. The results were discussed in the context of theory of narcissism.

# 9. HUMAN-COMPUTER INTERFACES: OPTIONS AND LIMITS TO EXERCISE CONTROL VIA VOLUNTARY CONTROLLED PUPILLARY CHANGES

### Ehlers, J., Bubalo, N. & Huckauf, A.

Size and responsiveness of the human pupil is at any time determined by the interplay of two antagonistic muscle groups, governed by the parasympathetic and sympathetic nervous system. Consequently, several studies (among others Vo et al., 2007; Bradley et al., 2008) refer to pupil size as a passive information channel that provides insight into the affective state of the viewer but defies any voluntary control. However, since physiological arousal is not limited to emotional experience but influenced by various cognitive processes, we assume pupil behavior, as a function of psychophysiological dimensions, to be brought under control by strategies of emotional regulation and cognitive load. A reliable control of this parameter could potentially provide an additional input channel in affective Human-Computer Interfaces (HCI) as proposed by Janisse (1974) at an early stage. Based on initial investigations of Ekman et al. (2008) we applied graphical real-time feedback on pupil diameter and utilized mechanisms of operant conditioning to gradually enable voluntary control over size and fluctuation. Participants were divided into two groups, each comprising a specific strategy known to have modulatory effects on pupil behavior (self-induced negative thoughts vs. arithmetic challenges). The content of the auto-suggestions was chosen freely and usually referred to private motives; mental arithmetic was realized using successive subtractions of fixed numeric values. By now, six subjects followed a two-week scheduled training procedure covering two sessions a week at comparable times of day and with not more than three days in between. Data analysis is currently in progress. The results may not only shed further light on learning achievements related to emotional control but will discuss the possibilities and limitations of pupil-based input options for the future development of adaptive HCI.

# **10. CAN DIFFERENT TYPES OF VALENCE BE DISSOCIATED IN THE EMOTION COMPONENTS? A REVIEW OF EMPIRICAL STUDIES**

### Gentsch, K., Beermann, U., Wu, L. & Scherer, K.R.

Appraisal theory proposes that different types of (micro-) valences operate during the subjective evaluation (i.e., appraisal) of relevant events. For example, pleasantness (i.e., appraisal of the sensual or hedonic meaning of an event) is distinguished from goal conduciveness appraisal (i.e., appraisal of the functionality of an event to achieve goals). Recently, other types of (micro-) valences were suggested (Shuman, Sander, and Scherer, 2013): power (i.e., appraisal of one's ability to act on an event), self-congruence (i.e., appraisal of an event's congruence with one's self-concepts), and moral goodness (i.e., appraisal of an event's congruence with one's ought and ideal self). Moreover, Scherer's Component Process Model (1984, 2001) predicts that each appraisal result drives the responses in the emotion components such as facial expression, autonomic physiology, action tendencies, and subjective feeling. In the current work, we examine the empirical plausibility of two predictions: (1) different types of valence appraisal operate, and (2) they affect differentially the emotion components. In order to achieve this, we review existing empirical articles that have investigated three types of valence (i.e., pleasantness, goal conduciveness, and power). In particular, the studies included into this meta-analysis measured these appraisals by using central and peripheral psychophysiological measures as well as self-report. Whenever possible, the effect size of the findings is reported. The results will be categorized for each emotion component. Additionally, we will apply our conclusions drawn from this work on our suggestions for future lines of research.

# **11. ATTENTION TO FACIAL EMOTION EXPRESSIONS IN AUTISM**

Griffiths, P., Batchelder, L. & Ashwin, C.

Autism spectrum conditions (ASC) are defined by impairments in social and communicative interaction and repetitive behaviour. One key area of weakness in individuals with ASC is emotion expression processing, with a wealth of studies showing recognition deficits and brain activation differences in this area. This difficulty pertains to emotional expressions in general, but has been documented to be strongly related to negative valence emotional expressions.

How individuals pay attention to different stimuli will often belie the difficulty that they have previously had with such stimuli. For example, those with social anxiety have been reported to pay preferential attention towards threat related stimuli, and previously we have shown that high autism trait individuals preferentially attend to emotionally valenced expressions over neural expressions.

The current study assessed attention biases in individuals with and without ASC using a dot-probe paradigm in order to assess differences in attention for emotional stimuli; specifically negative valence expressions. 20 individuals with ASC and 20 age, sex and IQ matched controls completed a dot-probe paradigm where facial emotion expressions (happy and angry) were paired with a neutral expression.

Results found that individuals with ASC showed a reduced attention bias for angry, but not happy emotional expressions compared to controls. This result was found even when social anxiety, a factor often implicated in ASC, was controlled for; thus eliminating the possibility that social anxiety was driving this effect.

A reduced attention for negative emotional expressions might hinder development of emotion recognition ability early in life, which could lead to the difficulties seen in those with ASC. However, this result conflicts with the pattern shown in those with high autistic traits, which opposes the spectrum view of ASC.

## 12. FUNCTIONAL AND DYSFUNCTIONAL RUMINATION IN ALCOHOL DEPENDENCE

### Grynberg, D., Briane, Y., de Timary, P. & Maurage, P.

Previous findings have shown that rumination predicts alcohol abuse independently of depression. However, the literature does not inform about the relationships between alcohol dependence and functional and dysfunctional rumination. It has indeed been suggested that there exist a functional form of rumination which refers to a concrete, experiential thinking and a dysfunctional form of rumination which refers to an abstract, analytical thinking. These two forms have been associated with different outcomes in terms of emotional vulnerability, mood, problem solving. In this study, our aim is to evaluate if alcohol dependence is similarly associated with functional/constructive rumination and dysfunctional/ unconstructive rumination. Forty participants (twenty alcohol abusers and twenty healthy subjects) have completed a validated and reliable questionnaire of rumination (the Cambridge Exeter Repetitive Thought Scale) as well as a questionnaire of depression (Beck Depression Inventory). The results have revealed that alcohol abusers have similar levels of functional rumination than healthy participants but report greater tendency for dysfunctional rumination. This effect stays significant after controlling for depression. This study thus supports that rumination is a main feature of alcohol dependence and suggests that it is the dysfunctional rumination that is problematic in alcohol dependence. At a theoretical level, these findings support that there exist two dimensions of rumination. At a clinical level, this study suggests that one should focus on rumination in the treatment of alcohol dependence.

# 13. UNDERSTANDING OF BODY SENSATIONS AND ACTION TENDENCIES ACCOMPANYING BASIC AND SELF-CONSCIOUS EMOTIONS IN CHILDREN AND **ADULTS**

#### Janke. B.

Recent research has shown that children can recognize pride as a facial expression when it is combined with specific body postures. These results can be a hint that children are able to deploy other expressive features than facial expressions in recognizing a particular emotion. While there is some research with adults and children demonstrating that they assume that certain body sensations and action tendencies co-occur with specific emotions, less is known whether children experience and are able to observe changes in body sensations and actions tendencies that co-occur with self-conscious emotions. The current study focuses on the understanding of body sensations and action tendencies accompanying happiness, anger, sadness and fear and the 2 self-conscious emotions of pride and shame in children and adults. A total of 112 children and adults (34 10-year olds, 28 12-year old children and 40 adults) had to match body sensations and action tendencies with 4 basic and 2 self-conscious emotion (pride and shame) given as a verbal label. Results indicated that not only adults but also children knew typical body sensations and action tendencies co-occurring with the four basic and the two self-conscious emotions. Clear-cut differences emerged between emotions indicating that adults and children were better in matching descriptions of joy, sadness, anger and pride than those of shame. In contrast there were no age differences in matching descriptions to fear. Interestingly, action tendencies were better recognized for joy, anger, and pride while body sensations were better recognized for fear, sadness and shame. Overall, these findings demonstrate that children from age 9 on and adults are able to infer emotional states from descriptions of body sensations and action tendencies. This knowledge gradually improves during development but can be seen as rich resource even for children to recognize emotions apart from facial expressions.

## 14. HUMILIATION AS AN INTENSE EMOTIONAL EXPERIENCE: EVIDENCE FROM THE **ELECTRO-ENCEPHALOGRAM.**

#### Jonas, K. & Otten, M.

Humiliation, the emotion associated with being put to the ground, lowered in status in the eyes of others, is often being described as a complex emotion, given that there are shame and anger elements associated with it. As a consequence of this conceptualization, humiliation seems to be a very intense emotion. As such, humiliation has been implied in recent theorizing to play an important role in the escalation of inter-individual and inter-group conflict. But the actual empirical evidence for such an increased intensity, compared to other emotions has not been delivered. Here we provide the first clear empirical evidence that humiliation is indeed a very intense experience compared to other positive and negative emotions, such as anger or happiness. Based on the electroencephalogram recorded from individuals reading scenarios that evoked either humiliation, anger or happiness, electrophysiological measures of cognitive intensity were derived for each of the emotion types. The late positive potential (LPP), a measure of the level of perceived (negative) affect, was markedly increased in humiliation scenarios compared to happiness and anger scenarios. In addition, event-related desynchronisation (ERD) in the alpha-frequency range, a measure of the overall intensity of cortical activation, was significantly more pronounced for humiliation than for happiness and anger scenarios. Our findings will be discussed in context of additional humiliation research that focusses on the intensity of humiliation stimuli and outcomes. Taken together, our data support the idea that humiliation is a particularly intense experience, that is quite likely to have far-reaching consequences.

## 15. EMOTIONS AND ACTIONS IN RESPONSE TO UNFAIR BEHAVIOR

Klimecki, O., Vuilleumier, P. & Sander, D.

To test how unfairness impacts social emotions, physiological function, and subsequent behavior, we developed a new economic paradigm: the Inequality Game. In this two-stage game, participants are faced with two other players. The fair player has a preference for equality while the unfair player has a preference for inequality. In the first stage of the game, participants' income mainly depends on the other players' choices (low power condition). During the second stage of the game, participants get the opportunity to punish or reward the other players (high power condition). We present the validation of this game on the level of affective experience, physiological response, and behavioral reactions in 40 men and discuss participants' preference for equality as well as the role of spiteful behavior.

## 16. THE INFLUENCE OF LATERAL IMPLICIT VISUAL AFFECTIVE STIMULI ON THE **EVALUATION OF NEUTRAL TARGETS**

#### Kobylińska, D. & Karwowska, D.

It is now well established that implicit affect influences explicit judgments. Findings from neurobiological studies indicate a relationship between the functioning of the human cerebral hemispheres and emotions. The aim of our research was to examine : (1) the direction of influence on neutral targets of suboptimal primes exposed for a duration of 16 milliseconds, (2) whether the influence of affective suboptimal primes on neutral targets depend on the hemisphere to which the prime is directed. We predicted that affective primes exposed centrally would influence the evaluation of neutral target stimuli in a direction opposite to that of their explicit effect. Second, we posited that the influence of primes on the evaluation of neutral target stimuli would be different depending on the visual field in which the primes were exposed. We present combined data from four experiments (that did not differ significantly from each other), conducted in a visual affective priming paradigm. Neutral target stimuli (ideographs exposed for a duration of 2 seconds) were sub-optimally primed by photographs of faces expressing joy or disgust exposed in either the LVF, RVF or CVF. Subjects were asked "to state how negative/positive the character trait that is represented by a given ideograph is". The hypotheses were supported. The evaluation of ideographs after negative priming was more positive than the evaluation of ideographs after positive priming (indicating a contrast effect). This effect appeared only when affective priming stimuli were exposed in the central visual field. The evaluation of ideographs differed depending on the visual field of prime exposure conditions: exposure of affective primes in the right visual field resulted in more positive evaluations of ideographs than ideographs following primes in the left visual field.

# **17. PERCEIVED TO FEEL LESS: INTENSITY DIFFERENCES IN INTERCULTURAL EMOTION PERCEPTION**

### Kommattam, P., Jonas, K. & Fischer, A.

Classic emotion research suggests that perceivers attribute less intensity to facial emotion expression of ethnic outgroups members than ethnic in-group members (Ekman et al., 1987). Emotional experiences of ethnic out-group members may therefore be perceived as less intense resulting in a lack of adequate responses on the side of the of perceiver. Yet there is little evidence for this assumption to date. We aimed to gain further insight into emotion perception between members of different groups, focusing on the interpretation of contextualized emotion intensity rather than the recognition of the correct emotion. We expected that perceivers should attribute less intense emotions to out-group displays of contempt, embarrassment, pride, surprise, fear, and happiness. Furthermore we expected that this difference in intensity perception should only occur in emotionally ambiguous contexts. To test these hypotheses we presented low intensity displays of facial expressions in ethnic in- and out-group members along with emotionally indicative or neutral scenarios. We found that perceivers attribute less intense emotions to out-group displays of embarrassment, pride, surprise, and fear. As predicted this intensity difference only occurred in emotionally ambiguous contexts. The finding that out-group members are perceived to feel less points to a potential mechanism underlying structural mistreatment of out-group members. At the same time, our results suggest that these intergroup differences in intensity ratings can be reduced by taking the emotional context into account.

## 18. FACING THE CHAMELEON. UNMASKING THE ROLE OF FACIAL EXPRESSIONS IN **INTERPERSONAL MIMICRY.**

#### Kulesza, W., Vallacher, R., Cislak, A., Bedynska, S. & Nowak, A.

This research addressed question concerning the role and consequences of facial mimicry in social interaction: are the effects of mimicry dependent on specific facial emotions? A paradigm is introduced in which participants interact over a computer setup with a confederate whose prerecorded facial displays are synchronized with participants' behavior to create the illusion of social interaction. In this experiment, the confederate did or did not mimic participants' facial displays of basic emotions. Mimicry promoted greater liking of the confederate regardless of which emotions were mimicked. Discussion centers on the utility of the paradigm for exploring issues in behavioral mimicry.

## **19. DO EMOTIONS INFLUENCE WHAT WE CARE ABOUT? THE EFFECT OF MORAL AND** NON-MORAL GUILT AND PRIDE ON VALUES

#### Landmann, H.

Guilt is argued to be a moral emotion that promotes pro-social behavior (e.g. Nelissen & Zeelenberg, 2007). However, it remains ambiguous whether the guilty feelings or the moral context in which these feelings arise causally affect pro-social behavior. We argue that the context of the emotion (moral vs. non-moral) but not the emotion itself (guilt vs. pride) affects moral values. To test this, we asked participants to do an autobiographical recall task in which we independently varied emotion (guilt vs. pride) and context (moral vs. non-moral). Afterwards, values from the Schwartz Value Survey (SVS) were assessed. Values from the self-transcendence vs. self-enhancement dimension were influenced by the context (moral vs. non-moral) but not by the emotion (guilt vs. pride). Conformity values were higher in the guilt conditions independent of whether the context was moral or non-moral. These findings suggest that the pro-social effect of guilt depends on the context of the emotion.

# 20. DOES HOSTILE SEXISM INCREASE OR DECREASE SOCIAL COMPETITION? IT **DEPENDS ON EMOTION: THE ROLE OF ANGER-RELATED AND EFFICACY-RELATED EMOTIONS**

### Lemonaki, E., Maio, G. & Manstead, T.

In three experiments we attempted to determine the way in which exposure to hostile sexism influences women's competitive collective action tendencies. Experiments 1 and 2 investigated the effect of hostile sexism (Glick & Fiske, 1996) on women's anger-related and efficacy-related emotions and their readiness to engage in social competition (Taifel & Turner, 1979) with men. Female participants (N = 127 and N = 108, respectively) read an article in which "hostile", "benevolent" or neutral beliefs about women were expressed by an unspecified sample of respondents to a survey. Participants then rated their emotions and their readiness to compete socially with men. Results from both experiments indicated that exposure to hostile sexist beliefs about women (a) increased angerrelated emotions, (b) decreased efficacy-related emotions, and (c) led to less intended social competition than did exposure to benevolent sexist beliefs or neutral beliefs. Moreover, exposure to hostile sexism had a positive indirect effect on social competition intentions through anger-related emotions (Experiment 2), and a negative indirect effect through efficacy-related emotions (Experiments 1 and 2).

In Experiment 3, we manipulated efficacy-related emotions with the aim of providing experimental evidence for the proposed causal link between efficacy-related emotions and intentions to engage in social competition. Female participants (N = 78) read an article explaining how female respondents in a previous study had reported feeling either "secure and comfortable" or "insecure and uncomfortable" about women's abilities to work together to advance women's interests. Subsequently, they rated their intentions to engage in social competition. As expected, results indicated that inducing lower levels of efficacy-related emotions reduced women's readiness to compete socially with men.

In sum, exposure to hostile sexism can both enhance and undermine women's readiness to engage in social competition, with readiness to compete increased by higher anger-related emotions and decreased by lower efficacy-related emotions.

# 21. THE INFLUENCE OF COMMON GROUP IDENTITY ON FEELINGS OF GUILT AND **IMPLICIT ATTITUDES**

#### Maliszewski, N. & Werner-Maliszewska, A.

The goal of the research was to study relationship between implicit attitudes and group emotions: anger and guilt. Study 1 was conducted two days after the Polish newspaper Rzeczpospolita published an article about the misleading use of the phrase "Polish concentration camps" by American journalists. The goal of Study 1 was to test whether prior activation of different in-group categories (Poles; victims of the Second World War - common group for Polish and Jews) affected the implicit attitudes (Poles vs. Jews) of readers of this newspaper article. The results showed that focusing attention on Polish national identity led readers to an implicit favoring of Poles and feelings of anger in comparison with the control group (who read the article without prior activation of national identity). Activation of the social category "we victims" (Poles and Jews together) led to a weakening of anger. In Study 2, subjects read an article about Poles who "robbed Jews in the ghetto of all their belongings." Prior activation of Polish national identity (Poles and Jews in 'different teams') among subjects reading this article led to reduced feelings of guilt. Activation of the social category "we victims" (common group - Poles and Jews together) led to a weakening of implicit favoring of Poles vs. Jews. Results suggested that activation of common group may lead to reduced feelings of guilt nad anger, but focus on national identity may cause stronger guilt and anger.

## 22. EMOTIONS, HAPPINESS AND HEDONIC ADAPTATION

### Martos-Montes, R., Ortega-Martínez, A., Ramírez-Fernández, E., García-Viedma, M. & Colmenero-Jiménez, J.

The main aim of this research has been to test the predictions of Hedonic Adaptation Prevention Model of Sheldon and Lyubomirsky (2012) with Spanish people and taking in account different measurement of well being and happiness. Hedonic adaptation is a psychological process through which people get used to positive and negative changes in our lives, so that the emotional effects of these changes are attenuated over time. Hedonic adaptation to positive events and to improvements in life circumstances (positive changes) is one of the biggest obstacles to raise and sustain happiness.

According this model, after a positive life change, two routes are responsible of Hedonic adaptation: declining positive emotions generated by the positive change and increased aspirations for even more positivity. Variety and appreciation are the two moderators of hedonic adaptation that can forestall these processes. Sheldon and Lyubomirsky have conducted an experimental study in order to support it, and we have carried out a similar study but with a Spanish sample.

The participants were 207 students from University of Jaén involved in a course of psychology. They were tested in a 3-month three wave longitudinal study. Students had to identify a positive change in their lives and they answered different questions about positive events, positive emotions, aspirations and appreciations derived from this change. All participants were measured in positive and negative affect, satisfaction with life, and also in optimism, subjective happiness, and psychological well-being. Our results show a basic hedonic adaptation process. Positive events and emotions initially derived from the positive change declined with time. Variety and appreciation declined also with the time. Furthermore, as expected, aspirations for more were increased. In general, we found partial support of our data to the Hedonic Adaptation Prevention Model.

### 23. ATTENTIVE TRACKING OF EMOTIONAL FACES

#### Müller-Bardorff, M., Kuhbandner, C. & Jahn, G.

In everyday life we are frequently confronted with dynamic scenes containing multiple moving stimuli that have to be attentionally filtered for control and planning of behavior. In previous research, modulation of visual selective attention by affective salience has been studied exclusively using static stimulus displays (e.g. visual search tasks). Therefore, it remains to be shown if threat advantages found in tasks using static stimuli extend to dynamic task settings (e.g., keeping track of individuals in a moving crowd). We examined whether emotional significance affects dynamic attention, employing the multiple object tracking paradigm. The stimulus material consisted of 72 photographs of facial stimuli expressing anger or neutrality. Participants initially searched for target faces among distractor faces (threatening among neutral faces, neutral among threatening, or visually marked neutral among neutral faces) in static displays. Subsequent to visual search, the faces started moving and participants tracked the target faces over time and movement (multiple object tracking). We hypothesized that attentive tracking should be facilitated when threatening faces were targets, and impaired when threatening faces were distractors. To control for possible effects of salient low-level visual features, the visibility of the facial expressions during movement was varied in three conditions (overt, covert, and flashing). In the covert condition facial expressions were replaced by identical looking images of the back of a head over the entire tracking period. For both, visual search and multiple object tracking, performance was enhanced for threatening compared to neutral targets. This threat advantage was less pronounced in multiple object tracking and importantly did not depend on feature visibility. Our results indicate that affective processing modulates selective visual attention in static and dynamic displays.

# 24. SELF-CRITICISM – IS IT DELIVERED OR RECEIVED? EXAMINING SELF-PERCEPTION IN SELF-CRITICAL EMOTIONS

### Sabo, J. & Giner-Sorolla, R.

Helen Lewis (1971) proposed the existence of a condemning part of the self that one may identify with as a defence against self-criticism. Inspired by this, our research explored the relationship between self-critical emotions, internal dialogues, and self-perception. We manipulated recall of four different self-critical emotion episodes among online survey respondents: shame, guilt, self-anger, and self-disgust. Shame more so than guilt and both of these more so than self-anger and self-disgust - should involve identifying as the recipient rather than the deliverer of self-criticism. Additionally, we explored the relation of internal dialogue to self-perception and the relevant emotions. Our first study (N = 183) found that when experiencing shame, one identifies as the recipient of one's own criticism significantly more than when experiencing any other emotion. A second study with improved methodology (N = 194) relatively more complete support to the hypothesis. It was found that shame more so than self-disgust involves identifying as the recipient of self-criticism, and that self-anger more so than shame involves identifying as the deliverer of self-criticism. Moreover, compared to shame, self-anger and self-disgust involved feeling the presence of an accusing internal dialogue. Taken together, these two studies suggest that experiencing shame makes one identify as the recipient of self-criticism, while experiencing self-anger or self-disgust makes one identify as the deliverer of self-criticism; a distinction not previously noted by research on these emotions.

# 25. WHO SAID THAT? - PUTATIVE SENDER CHARACTERISTICS CHANGE THE **PROCESSING OF SOCIAL FEEDBACK.**

#### Schindler, S., Steppacher, I., Wegrzyn, M. & Kissler, J.

Language has an intrinsically evaluative and communicative function. Words can serve to describe emotional traits and states in others and communicate such evaluations. Here, we investigate how the processing of trait adjectives is modulated by their perceived communicative source in anticipation and presentation of evaluative feedback.

In a first study 16 student volunteers underwent a social evaluative situation, consisting of videotaping the participants while they gave a short speech describing themselves. Based on this recording a stranger supposedly evaluated their personality, providing feedback by highlighting positive, negative or neutral trait adjectives. Participants saw the supposed feedback on a computer screen, while their cortical responses were recorded via EEG. In a control condition, participants were told that a computer program would randomly select trait adjectives. Actually, in both conditions words were presented and selected randomly.

Results showed stronger responses towards presented words and particularly towards the feedback presentation in the supposedly human-generated condition. These main effects started at about 100ms and remained throughout all time windows.

Moreover, in anticipation of the evaluative feedback, the supposedly human-generated negative and positive trait adjectives were differentially processed compared to neutral adjectives. At feedback presentation, an enhanced processing of affirmative positive decisions in the putative human-generated condition was found. This selfpositivity preference started at about 428ms right frontal, later shifting towards central regions.

These results confirm the impact of ascribed sender characteristics on the processing of emotional trait adjectives. Further, seemingly-realistic interactive settings may to contribute to a better understanding of influence from the social context on emotional word processing.

## 26. ELECTROPHYSIOLOGICAL SIGNATURES OF SOCIAL PRIMING OF AFFECTIVE JUDGMENT

#### Schnuerch, R. & Gibbons, H.

It is a fundamental aspect of human behavior to constantly evaluate objects or other beings as to how much we like or dislike them. However, such seemingly personal affective judgment is far from pure. We are frequently exposed to outside influence, given that we rarely make our decisions in isolation. Due to the unprecedented presence of communicative devices and interaction, we are more than ever confronted with a variety of social affective cues, such as our friends' "likes" or other users' average ratings. Previous research, both on social influence and on affective priming, has convergently shown that our judgment is indeed highly susceptible to the influence of social and affective stimulation preceding our judgment. We combined both approaches and used event-related brain potentials (ERPs) to investigate the neurocognitive signatures of social affective priming. Thirty participants evaluated Korean ideographs, indicating how much they liked or disliked each sign on a Likert scale. Crucially, the ostensible average rating of a group of previous participants was displayed immediately before each ideograph. As expected, participants adjusted their evaluation to these primes, rating randomly drawn ideographs as significantly more favorable after high group ratings than after low ones. Analysis of brain potentials during the processing of ideographs revealed that an early lateralized frontal as well as a later medio-frontal component of the ERP were modulated by the primes. The extent of both neural effects correlated with participants' tendency to adjust their ratings to the primes. Since these components might reflect automatic affective responses and explicit classification, respectively, our results indicate that social evaluative information directly influenced emotional processing and impression formation regarding the ideographs. This is in line with previous studies on social influence and extends research on affective priming, hinting at a modulation of truly affective processes.

## 27. SAME SITUATION DIFFERENT EMOTIONS? DIFFERENTIAL FEELING SELF-REPORT IN THE CONTEXT OF SELF-CONSCIOUS AWARENESS IS ASSOCIATED WITH DIFFERENT EMOTIONAL EXPRESSIONS

#### Von Garnier, S., Kreibig, S. & Gross, J.

What does feeling self-report tell us about a participant's emotional state? We tested whether differential feeling self-report within a given situation indicates different emotions by examining whether emotional responses on other response levels-in this case facial expressions-also differed. We analyzed data from 83 women in a paradigm that elicits self-conscious awareness by exposing participants and a confederate to a surreptitious recording of the participant singing a song. We obtained self-reported emotional feelings and a video recording of the participant's face. We grouped participants according to predominant feeling self-report. This resulted in an embarrassed group, an amused group, and a mixed emotional feelings group, which reported both emotions to an equal degree. For each participant, 90 one-second video segments were coded for facial movements associated with embarrassment, amusement, and mixed emotional feelings (Campos, Shiota, Keltner, Gonzaga, & Goetz, 2012; Harris, 2005; & Keltner, 1995) using the Facial Action Coding System (Ekman, Friesen, & Hager, 2002). The embarrassed and mixed emotional feelings groups displayed more frequent and longer gaze shift behavior than the amused group. The embarrassed group additionally displayed more intense gaze shifts than the amused group. While the embarrassed group showed more frequent lip bites than the mixed emotional feelings group, the latter displayed more frequent lip corner depressor. Although the three groups did not differ in non-Duchenne and controlled smiles, the mixed emotional feelings group more frequently displayed mixed smiles than the embarrassed group. The amused group displayed longer and more frequent Duchenne smiles; longer, more frequent, and more intense Duplay smiles; and longer and more intense Play smiles than the embarrassed or mixed emotional feelings groups. These results suggest that in the context of self-conscious awareness, different emotions may arise that relate to different self-reported feelings and facial expressions.

# 28. VALANCE-SPECIFIC ATTENTION ALLOCATION INCREASES PROCESSING OF EMOTIONAL WORDS IN LANGUAGE-RELATED BRAIN AREAS.

Wegrzyn, M., Herbert, C., Ethofer, T., Flaisch, T. & Kissler, J.

Emotional words can elicit strong responses and receive preferential processing in distributed brain regions. Since emotional words may be seen as endogenous attention elicitors, we investigate how top-down instructions modulate processing of emotional words. A key question is, whether responses in language-specific brain areas are increased when attention is allocated to words in a valence-specific way and how these effects compare to passive listening.

To address these issues, we carried out an auditory event-related fMRI study manipulating both word valence as well as attention allocation instructions. 15 participants were presented with negative, positive and neutral words, and asked to either pay attention to the negative or positive words, or to engage in passive listening of all word types. The Neurosynth meta-analytical database was used to extract regions of interest for the keywords "language" (middle temporal gyrus), "speech" (superior temporal gyrus / Heschl's gyrus) and "words" (inferior frontal gyrus / Broca's area). This ROI-driven analysis was complemented by an exploratory whole-brain massunivariate approach.

The ROI analyses revealed significant attention by word-type interactions in the inferior frontal gyrus (p < 0.001), with post-hoc analyses revealing a valence-congruent modulation effect. There was a trend towards significance in the middle temporal gyrus and no effect in Heschl's gyrus. The exploratory whole-brain analysis revealed significant and valence-congruent attention by word-type interactions in inferior frontal gyrus and prefrontal cortex, close to the a priori defined ROI corresponding to Broca's area, although more inferior in location (p<0.05; FWE-corrected).

Our results underscore the importance of language-related areas in processing emotional words and show that attention allocation can substantially alter these processes in a valence-congruent direction. The implications of endogenous and exogenous attention effects on word processing are discussed.

### 28.03.2014, 14:00-16:00

#### Paper Session 4.1: Psychopathology

### PRIDE AND SHAME IN SOCIAL ANXIETY

#### Gilboa-Schechtman, E., Shachar, I., Goern, Y. & Keshet, H.

Several lines of research combine to support positivity impairment in social anxiety (SA, Kashdan, 2008; Gilboa-Schechtman et al., 2013). Social rank accounts suggests that SA individuals preferentially interpret interpresonal relationships in terms of social rank and evaluate themselves as ranking low in social hierarchy (Gilbert, 2000). Stimulated by a functional perspective, contemporary theorizing also highlights the utility of examining distinct positive affective (PA) states, rather than global positive affectivity (Catalino & Fredrickson, 2011). Perhaps the most intriguing, as well as the most informative, investigation of SA-PA relationship concerns the emotion of pride, because it juxtaposes positivity impairment and social rank accounts.

In Study 1 we examined the relationship between SA, depression and the emotions of pride and shame. Participants (n= 185) filled self-report scales of shame and pride-proneness as well as measures of SA and depression severity. Using structural equation modeling we found that shame was uniquely, and positively, associated with SA, while pride was negatively associated with both SA and depression. In study 2, high (n=35) and low (n=46) SA participants recalled autobiographical events centering on pride and shame. Participants then rated these events on importance, intensity, re-experiencing and specificity (as in D'Argembeau & Van der Linden, 2008). Finally, they provided personal traits which were prominent for the event they described. Evaluations of pride and shame memories did not differ between high SA and low SA individuals. A content analysis of the trait adjectives revealed that, as compared to low SA individuals, high SA individuals listed more low-dominance traits, as self-descriptive. No such differences were observed for pride memories. Combined, data point at a discrepancy between trait-like ratings of pride assessed by questionnaires and evaluation and content of autobiographical pride experiences. Implications for the nature of positivity impairment and for social rank theories in SA are discussed.

## ATTENTION TO EMOTION ACROSS THE SPECTRUM OF AUTISM

### Griffiths, P. & Ashwin, C.

On a day to day basis we are presented with a host of visual information. In order to navigate the social world, we have to be able to quickly and effectively distinguish the important social events in our surroundings. Attention can only direct gaze to one visual item at a time. As such, the dot-probe paradigm was created to investigate our attention systems implicit priorities by presenting two competing visual stimuli and measuring reaction time to subsequent probes. As people with autism generally have difficulties with social interaction, especially negative emotions, the current study aimed to investigate whether this was related to the attention mechanisms for emotional expression information across the entire spectrum of autism.

In study 1, a dot-probe paradigm was employed in order to assess how people from the general population with high and low autism traits attend to both valenced and non-valenced facial expressions. Results revealed that, regardless of valence, those with higher autism traits paid preferential attention towards emotional expressions.

Study 2 examined this in individuals with autism finding that, relative to control participants, people with autism preferentially attended to negative, but not positive, emotional expressions.

These results suggest that both people with self-reported and clinically recorded difficulty with social interaction have an increased vigilance for emotional expressions. In autism, this effect seems specific to negative emotional expressions which reflects the difficulty previous studies have shown when this population is required to identify negative expressions. This is similar to the hyper-vigilance to disorder related stimuli seen in people with disorders such as social anxiety and phobias.

In conclusion, the spectrum of autism traits that runs through the entire population seems to affect how people intrinsically attend to emotional expressions, and this effect is more pronounced and specific at the clinical end of the spectrum.

# **EMOTION RECOGNITION IN CHILDREN WITH ATTENTION-DEFICIT HYPERACTIVITY** DISORDER

#### Gutierrez, R., Garrod, A., Lawrence, K. & Ludlow, A.

Accurate emotion recognition has been related to positive social interaction, as it allow individuals to correctly interpret social cues. Impairments associated to emotion recognitions have been identified in several developmental disorders, including Autism Spectrum Disorders and Attention-deficit hyperactivity disorder (ADHD). Some research suggests that children diagnosed with ADHD have deficits associated to general identification of emotions. However, other findings suggest that these impairments are limited to the recognition of negative emotions only. Importantly, most research has been performed using only facial expressions, leaving the role of social cues relatively unexplored. Twenty four children with a diagnosis of ADHD (hyperactive and combined type), aged 12 to 15 years participated in the study and were compared to twenty four children without ADHD matched on chronological age and verbal intelligence. The study used The Awareness of Social Inference Test (TASIT), a standardised measure of emotion recognition that presents 28 video vignettes of actors portraying the emotions of happiness, surprise, neutral, sadness, anger, anxiousness and revulsion. These videos show facial expressions, body language and contextual cues in a dynamic and ecologically valid form. Results showed that children with ADHD perform worse at identifying all emotions compared to their matched peers. This difference was larger for the displays of surprise, anxiousness and anger. Supporting previous findings, the inability to accurately recognise negative emotions such as anger and anxiousness may lead children with AHDH to misattribute the intentions of others, resulting in negative interactions and poor social skills, frequently associated to this condition.

### ACUTE LONELINESS AND SOCIAL BEHAVIORS IN A VIRTUAL SOCIAL ENVIRONMENT

#### Luhmann, M., Schönbrodt, F., Hawkley, L. & Cacioppo, J.

Feeling lonely motivates people to reconnect with others, but it can also trigger a vicious cycle of cognitions and behaviors that reinforces their loneliness. This study shows that the latter reaction occurs not only in real life, but also in virtual reality. 176 participants navigated a character in a virtual social environment and rated the character's loneliness multiple times during the game. At one point, the protagonist's 'spouse' leaves but returns later. Participants who ascribed higher loneliness to their protagonist during separation engaged their protagonist in more hostile and less affectionate behaviors towards the spouse later on. Participants' levels of loneliness were related to the level of ascribed loneliness only when the spouse was present but not when the spouse was absent, indicating that lonely people are more likely to perceive neutral social situations as potentially threatening, even in virtual reality. Implications for future studies and loneliness interventions will be discussed.

### EMPATHY DEFICITS IN ADOLESCENT MALES WITH ADHD AND CONDUCT DISORDER

#### Main, K., Thapar, A., Langley, K. & Van Goozen, S.

Background. A combined diagnosis of Attention Deficit Hyperactivity Disorder (ADHD) and Conduct Disorder (CD) is associated with poorer clinical outcomes than either disorder alone. Although empathy deficits have been identified in adolescents with ADHD, relatively little is known about how this may relate to risk for antisocial behaviour, specifically aggressive behaviour. Method. The current study measured affective and cognitive empathy in a clinical sample of 176 adolescent males with ADHD, of whom 85 had a diagnosis of comorbid CD. Within the ADHD/CD group we distinguished between those with (ADHD/CD+; n=30) and without (ADHD/CD-; n=61) aggressive CD symptoms. Participants watched four short film clips that aimed to induce four emotions; pain, sadness, happiness and fear. After each clip participants were asked to rate their own and the main character's emotions, and to give reasons for why they and the main character felt this way during the clip. Results. There were no differences in cognitive or affective empathy for fear and sadness between the ADHD and ADHD/CDgroups, but the ADHD/CD+ group displayed clear affective empathy deficits for these emotions. Conclusion. These results indicate that only those with ADHD and aggressive CD problems have a specific deficit in affective empathy for sadness and fear and highlight the need for targeted interventions within this subgroup. The results support the idea that the capacity to respond with an appropriate emotion to another's negative mental state may act as an inhibitor of aggressive behaviour through the vicarious experience of others' distress.

# DON'T MESS WITH MISTER IN-BETWEEN: INTERPLAY OF FACIAL FEATURES AND PROCESSING FLUENCY IN SOCIAL EVALUATION.

### Olszanowski, M., Winkielman, P., Gola, M. & Kaminska, O.

Understanding how people form initial social evaluations is theoretically and practically important. Here we show that social evaluations reflect the interplay of the feature information from the target's face (e.g. expression, gender, ethnicity) as well as the fluency of processing this information. In presented experiments, participants saw faces ranging from pure to mixed on one of the feature. They were ask to categorize these faces on a manipulated (e.g. mixed) or other, irrelevant for that feature dimension. The categorization made processing of "pure" faces easy and "mixed" faces difficult. Subsequently, we collected judgments of trust and attractiveness as well as physiological indicators of cognitive and affective response (EEG & EMG). We found that evaluative judgments decrease, relatively, for "mixed" faces and increase for "pure" faces, when participants were focused by categorisation task on manipulated dimension, while focusing on irrelevant/non-manipulated dimension did not affected the judgments or showed "beaty-in-averagness" effect (e.g. mixed ethnicity faces). The physiological data suggest that affective reactions to mixed expressions reflect spontaneous devaluation of ambiguity, independent of the explicit processing task. Thus, according to previously presented data (Winkielman, Olszanowski & Gola, submited), we discuss the role of early perceptual and later categorization processes evoked by task or processing context on evaluation.

### 28.03.2014, 14:00-16:00

### Paper Session 4.2: Emotion Communication

## **EMOTIONAL MIMICRY: THE ROLE OF EXPECTED EMOTIONS**

#### Fischer, A.

I will present some ideas on the role of expectations in emotional mimicry. Classic theories on mimicry have argued that observers mimic what they see, but in a recently developed contextual model of emotional mimicry (Hess & Fischer, 2013), it was argued that mimicry does not depend on actual facial movements, but on the relationship between observers and target. One crucial element in this model is that what the observers expects that the target is/will be feeling and we propose that in many cases expectations may be more important than actual facial movements. I will present results from different studies in which these expectations were manipulated in different ways. In one study, expectations of anger and disgust were manipulated and in another study, the presumed intensity of crying was manipulated. Results are discussed in the light of this contextual model.
# EMOTION IN VISUAL WORD PROCESSING - FROM LINGUISTIC TO CLINICAL AND SOCIAL RELEVANCE

### Kissler, J.

Both emotion and language serve a central function in human communication, but the mechanisms by which they interact have only recently moved into the scientific focus. This presentation aims to give an overview of the neural mechanism of emotional language processing in different contexts, ranging from silent reading to more complex interactive situations. During reading, electrophysiological brain responses evoked by emotional words differ from those evoked by neutral words. Differences occur early in visual processing, taking the form of an Early Posterior Negativity (EPN) between 200 and 300 ms after word onset, as well as later, at a more controlled evaluative processing stage, where a Late Positive Potential (LPP) is seen from around 500 ms. The EPN effect in healthy people is driven by a word's emotional intensity (arousal) and reflects attentional tagging and faster lexical access to emotional than to neutral words. LPP effects are more variable in terms of the emotion dimension they reflect, often being particularly sensitive to positive valence. This could mirror general evaluative and biases for positive linguistic material, consistent with Boucher and Osgood's Pollyana hypothesis (1969), or a self-positivity bias and other similar proposals stressing linguistic biases for positive contents. Deviations from this pattern are found in anxiety disorder and depression where accelerated and amplified responses to negative contents are found. These are discussed in terms of hypervigilance and mood congruent processing biases. Finally, recent work is presented that specifies modulation of early and late stages of emotion word processing by perceived communicative context in quasi-interactive situations where participants perceive themselves as interacting with different other humans or machines with varying capabilities. Results are integrated into a three stage model of emotional language processing.

# **EMOTION CATEGORIES AND DIMENSIONS IN THE FACIAL COMMUNICATION OF AFFECT: AN INTEGRATED APPROACH**

#### Mehu, M. & Scherer, K.R.

We investigated the role of facial expressivity in emotional communication, using both categorical and dimensional approaches. We used a corpus of enacted emotional expressions (GEMEP) in which professional actors are instructed, with the help of scenarios, to communicate a variety of emotional experiences. The results of Study 1 replicated earlier findings showing that only a minority of facial action units are associated with specific emotional categories. Likewise, facial expressivity did not show a specific association with particular emotional dimensions. Study 2 showed that facial expressivity plays a significant role both in the detection of emotions and in the judgment of their dimensional aspects, such as valence, activation, dominance, and predictability. In addition, a mediation model revealed that the association between facial expressivity and recognition of the signaler's emotional intentions is mediated by perceived emotional dimensions. We conclude that, from a production perspective, facial action units convey neither specific emotions nor specific emotional dimensions, but are associated with several emotions and several dimensions. From the perceiver's perspective, facial expressivity facilitated both dimensional and categorical judgments, and the former mediated the effect of facial expressivity on recognition accuracy. The classification of facial expressions into discrete emotional categories may therefore rely on the perception of more general dimensions such as valence and activation and, presumably, the underlying appraisals that are inferred from facial movements.

# FACIAL EXPRESSIONS COMMUNICATE BOTH APPRAISALS AND EMOTIONS

#### Mortillaro, M., Rotondi, I. & Scherer, K.R.

Most research on facial expression of emotion focused on a limited set of complex configurations of movements. Despite the fact that these configurations are clear signals for certain emotions, production studies showed that these configurations seldom occur in their complete form in non-posed expressions of emotion; in most cases expressers display only part of the configuration or even single movements (action units, AUs). In this talk we will discuss some recent empirical findings about the kind of emotional information that can be inferred from single facial movements when the context is absent. Based on recent theoretical models of emotion perception, we hypothesized that a) emotion terms would be more reliably used to label complex facial configurations than single movements, and b) appraisal terms would be used more consistently than emotion labels when perceivers see only single facial movements. In a series of perception studies, we showed that viewers can reliably infer appraisals from single AUs and that AUs form clusters that are in line with the predictions of appraisal theory. Multiple regression analyses showed that appraisal inferences from complex configurations could be predicted based on the appraisals of single AUs. Conversely, we found that emotion terms were more readily applied to configurations than to single movements. We argue that emotion labels have a complex meaning structure that is applied categorically to full facial configurations (holistic judgment). Appraisals, on the contrary, are more elementary features of the emotional experience and appraisal inference of complete configurations is mostly componential.

# VALIDITY OF THE GENEVA EMOTION RECOGNITION TEST (GERT)

#### Schlegel, K., Grandjean, D. & Scherer, K.

The ability to recognize other people's emotions from their face, voice, and body is crucial to successful functioning in private and professional life. Research on individual differences in emotion recognition ability has had a long tradition in psychology and sparked renewed interest as a basic component of the popular emotional intelligence construct. However, currently available tests to measure this ability are of limited ecological validity, as they mostly use stimuli from a single modality (usually the face) and include only a small number of emotions. In addition, only little research focused on the psychometric properties of such tests, such as internal consistency, dimensional structure, and construct validity. Here, we present the recently developed Geneva Emotion Recognition Test (GERT), in which participants are presented short video clips with sound in which actors portray 14 emotions. After each video, participants are asked to choose which of the 14 emotions had been expressed. Results from four studies conducted in different languages (German, French, Dutch) provide evidence for the satisfactory psychometric quality of the GERT as tested with Item Response Theory. Results support the construct validity of the test with respect to emotional and cognitive intelligence and personality. Furthermore, GERT scores predict performance in a face-to-face interaction (negotiation) more consistently than the widely used Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT). Finally, we demonstrate how GERT scores are related to participants' accuracy in making judgments about other people's personality. In summary, the GERT seems to be a promising alternative to traditional measures of ERA in the context of emotional intelligence.

# SMILING AND CRYING: WHAT DOES IT MEAN TO JUDGE EXPRESSIONS AS "GENUINE?"

### Vanman, E. & Horiguchi, M.

Recent research on emotion has seen a renewed interest in how people judge the genuineness of others' facial expressions, particularly with respect to smiling. In this paper we report the results of two lines of research, one focused on smiling and the other on crying, which examined how subjective ratings of genuineness are affected by facial features and mimicry. In three facial EMG experiments of smiling we found that people mimicked the perceived intensity of smiles, somewhat independently of what was actually featured in the face, but that this perceived intensity predicted ratings of genuineness regardless of whether mimicry occurred. We also conducted three experiments on the social perception of sadness using a set of pictures of people crying with visible tears or with the tears digitally removed. The first two experiments demonstrated that judgments of genuine sadness were affected by the presence of tears, even when they were presented for just 100 msec in a backwards masking task. The final experiment involved the use of facial EMG to measure brow activity while participants viewed the sad pictures and made ratings. Participants exhibited greater brow EMG activity when viewing photos with tears than photos without tears, and again this activity was related to ratings of how genuinely sad the person in the photo appeared. We conclude that it is the perception of the intensity of a facial expression that determines judgments of genuineness, irrespective of whether mimicry takes place or a "cue of genuineness" (e.g., the Duchenne marker for smiling) is present.

28.03.2014, 14:00-16:00

Paper Session 4.3: Anger And Envy

# WHAT CATCHES THE ENVIOUS EYE? HOW MALICIOUS AND BENIGN ENVY BIAS **ATTENTION**

### Crusius, J. & Lange, J.

We investigated how envy affects early attention allocation. Recent research has shown that people experience envy in two qualitatively distinct forms, malicious envy and benign envy. Even though both forms are experienced as highly negative emotions, they seem to motivate people to level the difference toward a more advantaged other in different ways: Malicious envy is associated with the motivation to harm the position of a superior other. Conversely, benign is associated with the motivation to improve oneself by moving upward. Because malicious envy is most likely in situations in which actors perceive little opportunity to improve their own outcome, we hypothesized that malicious envy should gear the cognitive system more strongly toward the other person than toward the superior fortune of the other. In contrast, only benign envy should tune the cognitive system toward environmental stimuli that are instrumental in levelling oneself up. We investigated these hypotheses with dot probe tasks. In line with our reasoning, Experiments 1 and 2 demonstrate that, within malicious envy, attention is biased more strongly toward the envied person than toward his or her advantage, whereas for benign envy, this difference does not occur. Experiment 3 provides evidence that benign, but not malicious, envy biases attention toward means to improve one's own outcome. The results suggest that benign and malicious envy affect early cognitive processing in different ways and highlight the utility of functional and process-oriented approaches to envy.

# ARE LEFTISTS MORE HOT-HEADED THAN RIGHTISTS? THE INTERACTIVE INFLUENCE OF IDEOLOGY AND EMOTIONS ON SUPPORT FOR POLICIES

# Pliskin, R., Halperin, E., Sheppes, G. & Bar-Tal, D.

While emotional processes and ideology both serve as important factors guiding government policy support in intergroup conflict, little is known about how ideology moderates the influence of emotions on policy support. We proposed that there should be a stronger association between emotions and policy support among leftists than among rightists, based on past findings that rightists are more rigid in their beliefs than leftists. Focusing on intergroup empathy, we hypothesized that leftists' positions would be influenced by the experience of empathy more than rightists' positions. This proposed interaction was examined by means of four studies conducted in Israel. We first manipulated levels of empathy towards the Palestinians (Study 1) and asylum seekers (Study 2) and examined how ideology moderated this manipulation's effect on support for conciliatory and humanitarian policies in these two intergroup settings. In both studies, the manipulation increased support for these policies only among leftists, despite significantly raising empathy among all participants. Studies 3 and 4 employed correlational designs, conducted among representative samples at two very different stages of the Israeli-Palestinian conflict: the lead-up to renewed peace negotiations in 2007 (Study 3) and the 2012 war in the Gaza Strip (Study 4). In addition to the interaction of ideology and empathy, in these studies we examined how ideology moderates the anger-policy support association. In both contexts, leftists' positions were more related to their emotions than those of rightists. Overall, we found that across different types of intergroup conflict, different emotions, and even different conflictrelated contexts, emotional processes lead to changes in policy support more among leftists than among rightists. The significance of these findings for the literatures on emotion, ideology, and intergroup conflict is discussed, as are the possible applied benefits.

# PERCEIVING ANGRY FACIAL EXPRESSIONS: CONSEQUENCES FOR APPROACH-**AVOIDANCE RESPONSES**

#### Reichardt, R. & Deutsch, R.

There is inconsistent evidence as to whether angry faces evoke approach or avoidance tendencies. The present research sought to resolve this debate. We suggest that approach-avoidance movements can serve various goals (e.g., affiliation, aggression). Furthermore, we assume that these goals determine the effect of angry faces on approach-avoidance tendencies. In particular, angry faces communicate aggressive intentions and may therefore evoke aggressive tendencies in the perceiver. Thus, angry faces should trigger approach only when it serves aggresssion but not when it serves affiliation. Three studies showed that angry faces facilitated approach, when the behavior was represented as aggressive approach, but not when it was represented as peaceful approach. Furthermore, when approach was represented as peaceful approach and, hence, aggression was not an available option, angry faces facilitated avoidance. In sum, angry faces can evoke approach or avoidance, depending on the goals associated with these behaviors.

### DISPOSITIONAL ENVY: CONCEPTUAL AND EMPIRICAL CONSIDERATIONS

#### Rentzsch, K.

Envy is an intense feeling of discomfort when someone realises that another person possesses something they themself long, strive or wish for. This description refers to envy as an emotional state, which has been the center of attention of previous research. However, there is only comparably little empirical research on general tendencies to envy. The present research is primarily concerned with envy as an affective trait, i.e. dispositional envy. In three studies (N1 = 198, N2 = 637, N3 = 72), the correlates of dispositional envy and its predictions were examined. Results revealed that dispositional envy remained stable over a 2- and a 3-months period, highlighting the trait character of this construct. Dispositional envy correlated with negative self-perceptions (such as neuroticism), interpersonal tendencies (such as comparison orientation, hostility), and mental health (such as anxiety). Furthermore, results from a study in a large nonstudent sample revealed that dispositional envy was negatively related to age while not being related to gender. Interestingly, dispositional envy was also related to less smoking, more fitness, and less chronic diseases, pointing to positive aspects of a construct hitherto mainly associated with negative aspects. Investigating dyadic interactions between unacquainted participants, dispositional envy predicted envious feelings in participants who had been assigned to an envy condition. Placing dispositional envy in a network of similar and dissimilar constructs, the current findings provide a basis for drawing conclusions on the conceptual nature of dispositional envy. Moreover, the development of the Domain Specific Dispositional Envy Scale, a multidimensional instrument with good psychometric properties, is described.

### **EVIDENCE THAT PROSOCIALITY FOLLOWING ANGER IS GOAL DIRECTED**

#### Van Doorn, J., Breugelmans, S. & Zeelenberg, M.

Anger is one of the most frequently experienced emotions. It has been shown to relate to aggressive, punitive, and antagonistic behaviors as well as to more positive behaviors such as compensation to a victim and helping the disadvantaged. It remains unclear, however, when and why anger leads to either antisocial or prosocial behavior. In several experiments it is revealed that experimentally induced anger leads to prosocial behavior in triadic situations (where one observes injustice), and that there is even a preference for prosocial behavior over antisocial behavior when one can right a wrong (i.e., restore injustice) with that behavior. Results further show that when injustice is already restored by another party, and the goal of anger is fulfilled, the experienced anger as well as the motivation to act prosocially decrease. These studies suggest that the behaviors stemming from anger, be it antagonistic or prosocial, are a situation-specific and goal-directed reaction to injustice.

# **EMOTIONS OF ANGER IN POLITICAL SCANDALS**

Verbalyte, M.

In my dissertation, I am analyzing how during the political scandal emotions are articulated in the public discourse. This research is based on the assumption that far from being spontaneous, emotions of the general public are strongly shaped and guided by the public discourse.

This also applies for anger about the norm violation which is the precondition of the "real" political scandal. The discursive media analysis of two German scandals reveals that at the beginning of scandal, the status of the scandalous event as a norm violation is far from clear and should be determined in the course of scandal. It means respectively, that anger and even more so moral outrage of the public are also not always present at the same beginning of event, but are evoked, strengthened and amplified as the scandal progresses.

The main focus of my presentation will be this transformation of the primary negative affect, disappointment, general frustration, or simply political ignorance into the anger and even more demanding moral indignation. It is done by blaming the scandalized politician; moral framing of information related to the event; as well as expressing and attributing anger to some relevant society groups, politicians, or the citizens. In the latter way, anger is presented as already publicly dominating emotion and thus, contributes to the establishment of it in the scandal.

Moreover, I will also depict the process of blame attribution becoming stable personality attribution and continuous humiliation of the scandalized person leading to resentment, contempt, and hate to her/him as emotions dominating in the discourse. In contrast to anger, which has a tendency to correct the person, contempt and hate seek for the complete exclusion of politician from the political community. However, the theory of political scandal has not paid enough attention to these subtle shadows of anger.

### 28.03.2014, 14:00-16:00

#### Symposium 4.1

# **MULTILEVEL EXPLANATIONS OF THE SOCIALITY OF EMOTION**

#### Von Scheve, C., Schröder, T., Schauenburg, G., Ambrasat, J. & Schmidtke, D.

Emotions result from complex, multiple interactions of biological, cognitive, social, and cultural processes. Different paradigms of emotion research have tended to focus on either of those. Biological approaches view emotions as representations of bodily states. Cognitive theories construe emotions as emerging from more general mental processes such as the appraisal of events in relation to goals. Micro-Social models emphasize the role of social interaction in generating emotion. Macro-Social models are preoccupied with the cultural construction of emotions and feeling rules.

In this symposium, we attempt to offer an integrative, multi-level perspective on the sociality of emotion. Some of the talks will address theoretical ideas, while others describe empirical studies that are based on these ideas at different levels of explanation. The goal is to show how integrative theory-building capitalizing on the insights of different scientific disciplines can meaningfully tie together empirical discoveries spanning across psychology, neuroscience, and sociology.

The first talk by Christian von Scheve will discuss David Heise's sociological affect control theory as a conceptual and methodological hub for the sensible interaction of theories of emotion at multiple levels of explanation, from the neural to the cultural. This theory holds that emotions communicate to the self and others the extent to which cultural expectations have been met in specific social events. This process is inherently social since it rests on culturally shared conceptual structures, which are grounded in the basic dimensions of affect, i.e. evaluationvalence, potency-control, and activity-arousal.

The second talk by Tobias Schröder complements the affect control view of emotions by portraying Chris Eliasmith's "semantic pointers" as a neurocomputational mechanism that implements in the human brain the conceptual processes that underlie the sociality of emotion. Semantic pointers are patterns of distributed neural firing activity that have symbol-like properties through their capacity to encode and combine compressed versions of lower-level neural processes. This allows a compositional hierarchy of "representations of representations" and - importantly - provides a pathway for integrating the biological and the symbolic aspects of emotions.

The remaining three talks present empirical studies built on our multilevel framework. Gesche Schauenburg presents data from an EEG experiment, aimed at finding a neural correlate of the expectancy-violation mechanism thought as crucial for emotion generation in affect control theory. The data show that the emotional incoherence of a social event, as computed with the mathematical model that implements affect control theory, predicts the amplitude of the N400 in subjects who read descriptions of such events. The N400 is often interpreted as corresponding to a difficulty to integrate new information into a given semantic context. Thus, this experiment supports a core idea from a sociological theory with neural data.

Next, Jens Ambrasat presents results from a large-scale representative survey of the German population who rated 910 social concepts along the evaluation-valence, potency-control, and activity-arousal dimensions of affect with the semantic differential technique. This procedure allows an empirical assessment of the collective affectgrounded conceptual structures thought to guide emotional experience according to affect control theory. Jens Ambrasat will show that there are subtle differences in the affective meaning of concepts across subgroups of society with different socio-economic status and lifestyles.

David Schmidtke completes the Symposium with a cross-cultural perspective. He presents a comparison of the conceptual structures underlying emotion generation across American English, European Spanish, and German, based on Bradley and Lang's ANEW (Affective Norms for English Words), a repository of sentiments attached to words, and its Spanish and German translations. Cluster analyses of the differences in evaluation-valence, potencycontrol, and activity-arousal ratings across these cultures reveal emergent patterns of qualitative differences in making sense of social experience. In conjunction with the data shown by Jens Ambrasat, these results point to meaningful links between culture, social structure within culture, and emotional experience, ultimately embodied in brains through semantic pointers.

### AFFECT CONTROL THEORY AND THE SOCIALITY OF EMOTION

#### Von Scheve, C.

Scholars increasingly understand emotions as dynamic and socially constructed, reflecting cultural, relational, situational, and biological influences. While researchers have called for a multi-level theory of emotion construction, any progress toward such a theory must overcome the fragmentation of relevant research across disciplines and theoretical frameworks. Based on a recent collaboration with K. Rogers and T. Schroeder, this talk discusses affect control theory as a possible launching point for conceptualizing the sociality of emotion across multiple levels and disciplines. Although the theory is clearly sociological in scope, its empirically grounded conceptualization of social mechanisms operating at the social interaction, relationship, and cultural level and its specification of processes linking social and individual aspects of emotion make it a worthy candidate to interface various disciplinary paradigms in emotion research. After introducing the theory, I will briefly illustrate its correspondence with select theories of emotion construction at the cultural and individual levels.

### **EMOTIONS AS SEMANTIC POINTERS: CONSTRUCTIVE NEURAL MECHANISMS**

#### Schröder, T.

I will speak about the current development of POEM, a neurocomputational model of emotions whose goal it is to unify differing perspectives on emotion generation across the disciplines (Thagard & Schröder, in press; Schröder, Kajiç, Stewart, & Thagard, in preparation). POEM capitalizes on Eliasmith's (2012, 2013) concept of semantic pointers, a neural process hypothesized to provide explanations of many kinds of cognitive phenomena from lowlevel perceptual abilities to high-level reasoning. Semantic pointers are patterns of distributed neural firing activity that have symbol-like properties through their capacity to encode and combine compressed versions of lower-level neural processes. This allows a compositional hierarchy of "representations of representations" and – importantly – provides a pathway for integrating the biological and the symbolic aspects of emotions. Based on computer simulations of major emotional phenomena, I will argue that the semantic pointer theory of emotions can integrate major lines of theorizing in the affective sciences operating at multiple levels of explanation from the neural to the cognitive to the social and cultural.

# EEG CORRELATES OF AFFECTIVE PROCESSING OF SOCIAL INTERACTIONS

#### Schauenburg, G. & Conrad, M.

I present EEG data investigating the question if a mathematical model of affective coherence based on Heise's (2007) affect control theory can predict the N400's amplitude during the processing of social interactions. Affective coherence defines the degree to which a given social interaction is satisfies prevailing social and cultural norms which are induced by the interplay of the emotional connotations of involved linguistic concepts. Affective coherence can be mathematically modeled by regressing the empirically obtained ratings of the evaluation, activity and potency dimension of words (cf. Osgood, Suci, & Tannenbaum, 1957) in the context of a sample of given events on out-of-context semantic differential ratings of the same words.

Previously, the mathematical model of affective coherence has been supported by computer simulations and behavioral studies (Schröder, 2011). Here, we focused on social information processing from a neuroscientific perspective. Following a typical N400 design (cf. Kutas & Federmeier, 2011) by which the last stimulus in some way or another is not expected or does not fit previous stimuli, we presented sentences describing social interactions in a basic actor-behavior-object manner in three conditions of affective coherence: low, medium, and high. We expected the N400's amplitude to be systematically modulated as a function of degree of emotional consistency: the less affectively coherent a sentence is the larger the N400 should be. Across conditions, we controlled for a variety of variables putatively influencing sentence processing, e.g. co-occurrences of subjectobject and verb-object relationship and cloze probability. By applying an elaborate procedure for stimuli generation, we could ensure that stimuli differ only in the emotional coherence of their resulting combinations at a sentence level.

# AFFECTIVE MEANINGS AND THE DEPENDENCE OF EMOTIONS ON SOCIAL **STRUCTURE**

#### Ambrasat, J.

I investigate variations of affective meanings of concepts within a society and relate them to measures of social differentiation. According to Affect Control Theory, affective meanings are the conceptual and methodological fundament to explain how the social shapes emotions. The knowledge of affective meanings, usually measured with Osgood's semantic differential technique, is widely explored in cross-national comparisons. In doing so, affective meanings are treated as socially shared phenomena indicating cultural distinctions that result from different institutional settings, e.g. between East-Asian and Western countries. Complementing this cross-cultural perspective, I investigate the sociality of emotion on a more subtle level, where the individual's experience in interaction with or distinction to other members of the society becomes visible. The study focusses on variations of affective meanings between several social groups, status and lifestyle groups, and explores how social differentiation is associated with distinctive affective meaning structures. The analyses base on specifically conducted data from a Germany-wide representative survey of 3000 participants. The linguistic material comprising 910 German words was rated on the three affective core dimensions - evaluation, potency and arousal. To structure the complex word field, cluster analyses were used to organize words according to the similarity of their affective meanings across the EPA space. Subsequently, these clusters will be used in mixed-effects regression models as item level characteristics to test significant associations between cluster specific affective meanings and status and lifestyle groups.

Results reveal that affective meanings are socially structured along common measures of social differentiation. For this reason, the social situation and environment of individuals has to be recognized in a multilevel approach to emotions.

# WHAT DO AFFECTIVE NORMS FOR WORDS TELL US ABOUT CULTURES? A COMPARISON OF ENGLISH, GERMAN, AND SPANISH

### Schmidtke, D. & Conrad, M.

Cultural comparisons are to be located in the cross-section of conflicting methodological approaches of social and psychological science. Presenting a comparison of North American, German, and Spanish cultures, the present study aims to reconcile both qualitative, hermeneutic and quantitative, explanatory methods in an innovative, strictly explorative approach.

A promising base for comparative linguistic research are adaptations of the 'Affective Norms for English Words' (ANEW) (Bradley & Lang, 1999) into Spanish (Redondo, Fraga, Padrón, & Comesaña, 2007) and German (Schmidtke, Schröder, Jacobs, & Conrad, submitted) that help to assure the comparability of empirical findings on emotion processing across different language contexts. Given that language represents an objectification of the conceptual structures shared in one culture, the distinct distribution of words across the affective space approximates a culture's implicit theory of socio-emotional experience and behavior.

Based on these assumptions, our goal is to identify and compare conceptual categories that the corresponding cultures (understood as linguistic groups) have constructed based on their social experiences by means of multiple regression and cluster analysis. According to Schneider & Roberts' (2005), clustering concepts mathematically based on the similarity of their affective meanings is akin to the abstraction and identification of higher-order categories that are central to qualitative research methods. A bottom-up analysis of the relations between symbols therefore follows a qualitative research paradigm, but in a stringent, theory-guided way, by capitalizing on quantitative measures of affective meaning.

### 28.03.2014, 14:00-16:00

#### Symposium 4.2

# TOO LITTLE OR TOO MUCH FLEXIBILITY IN THOUGHTS AND FEELINGS: ASSOCIATIONS WITH PSYCHOLOGICAL HEALTH AND WELL-BEING IN DAILY LIFE

Koval, P., Brose, A., Wrzus, C., Takano, K. & Ebner-Priemer. U.

Socioemotional flexibility is considered to be adaptive because it implies a person's ability to respond to changes within and across situations. The purpose of this symposium is to explore this claim by considering whether too little flexibility, but also too much flexibility, is maladaptive. Perseverative cognitive processes such as rumination, worry and other forms of repetitive negative thinking can be considered one form of inflexibility that is associated with poor psychological functioning. Here, thoughts about a negative experience linger on, preventing flexible problem solving in times of stress, for example. Another form of inflexibility relates to perseveration of affective states. This phenomenon, labeled 'emotional inertia', involves the tendency for affective experiences to carry over from one moment to the next. Inertia has also recently been identified as a correlate of psychological maladjustment. However, in the domain of affective functioning too much flexibility also appears to be maladaptive (e.g., in borderline personality disorder).

This symposium presents studies examining affective (in-)stability, how cognitive and affective perseveration are related, and how each relates to important health and well-being outcomes in daily life. In particular, Koval et al. present two studies examining how trait rumination relates to emotional inertia, and how each uniquely relates to depressive symptoms. Brose et al. extend upon these studies by examining how emotional inertia and rumination at both the state and trait levels are related and each uniquely predict depression. Wrzus et al. report age group differences in the interplay between affective and cognitive perseveration following stressful events. Takano et al. present research investigating how rumination relates to sleep quality in daily life. Ebner-Priemer et al. will allude to the maladaptive nature of too much flexibility in the affective domain and how this is related to instability in self-esteem.

# 'GETTING STUCK' IN DEPRESSION: THE ROLES OF RUMINATION AND EMOTIONAL **INERTIA**

#### Koval, P., Kuppens, P., Allen, N & Sheeber, L.

Like many other mental disorders, depression is characterized by psychological inflexibility. Two instances of such inflexibility are rumination: repetitive cognitions focusing on the causes and consequences of depressive symptoms; and emotional inertia: the tendency for affective states to be resistant to change. In two studies, we tested the predictions that a) rumination and emotional inertia are related; and b) both independently contribute to depressive symptoms. We examined emotional inertia of subjective affective experiences in daily life among a non-clinical sample of undergraduates (Study 1), and of affective behaviors during a family interaction task in a sample of clinically depressed and non-depressed adolescents (Study 2). In both studies, we examined how emotional inertia was related to self-reported rumination and depression severity. We found, across both studies, that rumination (particularly the brooding facet) and emotional inertia (particularly of sad/dysphoric affect) were positively associated, and both independently predicted depression severity. These findings demonstrate the importance of studying both cognitive and affective inflexibility in depression.

# EMOTIONAL INERTIA AND RUMINATION: FURTHER EVIDENCE FOR THEIR UNIQUE AND SHARED RELEVANCE FOR DEPRESSIVE SYMPTOMS

#### Brose, A., Koval, P., Schmiedek, F. & Kuppens, P.

Emotional inertia refers to the extent to which emotions carry over from one moment to the next. Inertia is higher among individuals with comparatively high levels of depressive symptoms. First insights suggest that this relationship cannot be reduced to the global tendency to ruminate, which is important because rumination means to have lingering thoughts about negative feelings which can prolong negative affective experiences. In this study we challenge the role of emotional inertia on depressive symptoms in three further ways. First, we use a different timescale to investigate emotional inertia (the day-to-day timescale) and examine its (predictive) relationship with depression. Second, we examine whether emotional inertia is uniquely related to depression when taking not only trait, but also state rumination into account. Third, we test the relevance of emotional inertia for depressive symptoms over and above the within-person interplay between negative affect and rumination. In a microlongitudinal design, 101 younger adults (20-31) rated their momentary affect and rumination on 100 occasions. Depressive symptoms were assessed at pre- and posttest as well as a 2-year follow-up. Results replicated prior findings on a new timescale: emotional inertia predicted depression over and above trait rumination. Furthermore, emotional inertia was related to depression over and above state rumination, and it remained an independent predictor of depression when also adjusting for the affect-rumination interplay. In summary, this study's findings add to the mounting evidence that the emotional dynamics reflected by emotional inertia are relevant for depressive symptomatology, and that there is something unique to emotional inertia independent of rumination.

# AGE-RELATED DIFFERENCES IN AFFECTIVE RESPONSES TO DAILY HASSLES **RELATE TO ELAPSED TIME AND PREOCCUPATION**

#### Wrzus, C., Luong, G., Wagner, G &, Riediger, M.

Past research has shown there are age differences in affective reactivity to hassles. It is unclear, however, the extent to which these age differences may be influenced by the amount of time that has elapsed following the hassle and how much one is still preoccupied with the hassle. Using a mobile phone-based experience-sampling approach, 397 participants aged 12 to 88 years reported their momentary activating, e.g., angry, and deactivating, e.g., disappointed, negative affect (NA) and occurrences of hassles on average 55 times over 3 weeks. When hassles had occurred, participants also reported how long ago the hassle had occurred and how much they were currently preoccupied by it. Multilevel modeling results showed that when hassles occurred longer ago compared to more recent hassles, people reported less intense activating, yet more intense deactivating NA, irrespective of their age. Activating and deactivating NA were both more intense the more people were preoccupied with the hassle, and more so the older the participants were. The interaction between preoccupation, elapsed time, and age showed that when individuals were not preoccupied by the event, deactivating NA was generally more intense the longer ago the hassle had occurred; with greater preoccupation, this effect was more pronounced for people older than 41 years, yet for people younger than 32 years, deactivating NA was less intense the longer ago the hassle had occurred. The results highlight that affective experiences in response to naturally-occurring hassles often entail blends of activating and deactivating NA, whose relative intensity differ depending on how long ago the event occurred. The findings also indicate that being preoccupied with a recent hassle relates distinctly to people's affective experiences across the lifespan. We discuss the implications of these findings for the understanding of emotional development.

### ESM RESEARCH ON RUMINATION AND SLEEP DISTURBANCE

Takano, K., Sakamoto, S. & Tanno, Y.

Repetitive thought, such as worry and rumination, is known to be a serious cognitive risk factor of psychological problems including depression and anxiety. In the literature on sleep disturbance and insomnia, repetitive thought also has increasingly received attention as one of the critical factors that contributes to the maintenance and exacerbation of sleep problems. However, because extant studies worked with repetitive thought as an experimental manipulation in a laboratory or conceptualized it as a stable, trait-like characteristic, little evidence exists for the association between sleep and repetitive thought as it occurs naturally in daily life. In my talk, I will discuss about recent ESM/EMA studies that investigated how rumination influences everyday sleep in the associations of psycho-physiological parameters such as emotional, physical, and autonomic activities.

### ON THE DYNAMICAL RELATION BETWEEN AFFECT AND SELF-ESTEEM IN **PSYCHIATRIC PATIENTS AND HEALTHY CONTROLS**

#### Ebner-Priemer, U., Santangelo, P., Koudela-Hamila, S. & Bohus, M.

Affective flexibility is usually associated with psychological health. However, in patients diagnosed with Borderline Personality Disorder (BPD) affective instability comes to its extremes. Accordingly, affective instability is a classification criterion for psychopathology in BPD. The advent of e-diaries facilitated the assessment of unstable symptoms and resulted in multiple studies on affective instability in BPD. However, instability in self-esteem, another classification criterion of BPD, has not yet been examined. In addition, it's unclear how both unstable symptoms are related to each other over time. We used e-diaries to examine affective instability and instability of self-esteem in everyday life. 78 female BPD patients and 75 female healthy control participants carried e-diaries over four consecutive days for 12 hours each. The e-dairies prompted participants approximately every 60 minutes ( $\pm$  10 minutes) to rate their current affective state, state of distress, and momentary self-esteem. To analyze instability of affect and self-esteem, we used three state-of-the-art instability indices, namely a multi-level model for squared successive differences (a gamma model with a log link), a multilevel model for probability of acute changes (a logistic model with a logit link), and aggregated point-by-point changes. The statistical analyses clearly confirmed our hypotheses. Patients with BPD showed a persistent pattern of heightened instability compared to HCs regarding self-esteem as well as distress and affect independent of the instability indices used. Analyses examining how both unstable symptoms are related to each other over time will be reported. Finally, we will discuss methodological considerations, namely choosing an adequate time-sampling strategy that fits the underlying process, taking into account the temporal order of data (i.e., distinguishing between instability and variability), as well as considering the mathematical dependency of instability and intensity

### 28.03.2014, 16:30-18:30

### Paper Session 5.1: How To Be Happy: Positive And Negative Emotions

### HOW DEEP IS YOUR LOVE? ON THE PROFUNDITY OF ROMANTIC LOVE

#### Ben-Ze'ev, A. & Krebs, A.

A conceptual framework explaining the profundity of romantic love, while distinguishing it from intense love, is presented. Romantic intensity can be distinguished from romantic profundity by referring to the temporal dimension. Romantic intensity mainly expresses a snapshot picture of an emotional experience at a given moment. In order to capture the dynamic and ongoing activities, which are constitutive of love and take place over a certain period of time, we can refer to the notion of "romantic profundity." This notion is described along two axes: intensity and temporal duration. Romantic intensity refers to the strength of feeling, cognitive, evaluative and motivational components. This intensity is measured at any point in time, as a kind of a snapshot picture. When the temporal dimension of duration, which involves certain ongoing activities, is added to the romantic intensity romantic profundity is created. Romantic profundity is constituted not by any kind of added activities, but with those which promote the flourishing of the relationship and each individual. Profound intrinsic actual activities, which are shared by the couple, as well as intrinsic activities promoting each partner, are prime examples of such activities. The choice of such activities cannot be arbitrary, as they must be of benefit to and compatible with the agent's personality and flourishing. These activities are often calm in nature as the profound loving relationship usually lacks significant tense and provide a kind of serenity. Taking into account the profundity of love makes it more complex to tell in advance what romantic compromises to avoid and what to make, as the romantic compromise in the short-run may turn into profound love in the long-run.

# A PROTOCOL FOR STUDYING THE IMPACT OF POSITIVE VS. NEGATIVE EMOTIONS **ON A PREDEFINED SEQUENCE OF FULL-BODY MOVEMENTS**

#### Giraud, T., Demulier, V., Focone, F., Isableu, B. & Martin, J.

Body postures and movements are often used to communicate emotions (App et al., 2011). However, studies focusing on whole body affective signals are scarce (De Gelder, 2013). Indeed, the generation and quantification of emotionally expressive body movements remains methodologically complex (Gross et al., 2010). To overcome previous research issues - effect of emotion distinguishable from task characteristics, emotional context ecologically valid and multicomponent evaluation of the elicited emotions – we propose in the present paper a fitness task as a basis for a new protocol for elicitating bodily expressions of emotion. After the realization of a predefined movement sequence (1 minute) in a neutral context, participants (n = 33) reproduced this sequence under two valenced conditions. In the positive condition, the participants received a gift and watched a 1:30 minute mash-up of funny videos before starting the recording. In the negative condition, an experimenter made the participants believe that the video of their movements were remotely displayed in a lecture hall in front of hundreds of students. Participants' movements were collected with a full body motion capture system. To assess the emotional state of the participants, we combined physiological measures (DEA) and self-reports (DES, Ouss et al., 1990). Results shows a significant increase of the tonic response of DEA scores between the neutral - positive conditions and the neutral - negative conditions. The DES report for the happiness scale reveals a significant increase between the negative - positive conditions and a tendency between the neutral and positive conditions. It also reveals a significant increase of the surprise scale between the positive – negative conditions and the neutral and negative conditions. These results validate our protocol since it enables to induce different valenced states during the generation of a predefined movement sequence. Moderation effects of personality measures are discussed (Big Five, Plaisant et al., 2010 and Stai Trait, Spielberger et al., 1993).

### **NEURO-COGNITIVE AND EMOTIONAL PROCESSING OF GARDEN-PATH JOKES**

#### Mayerhofer, B. & Schacht, A.

Humor is usually triggered by a specific interaction between a stimulus in the environment and its cognitive elaboration. Especially stimuli that introduce a committed wrong belief which then needs to be revised in the light of new evidence (incongruity-resolution models) carry the potential to be perceived as humorous. Humor can be considered an emotional state or reaction that allows human beings to engage in a playful state of mind and to practice their intellectual, physical, and social skills in a safe context. In garden path jokes (GP jokes), an initially dominant semantic representation of an ambiguous text is violated. It needs to be revised in order to reestablish a coherent representation. 48 GP jokes were manipulated and presented to participants in three conditions: (i) with coherent ending, (ii) with joke ending, or (iii) with discourse-incoherent ending. A rating study (N=69), a reading times study (N =24), and three studies with recordings of ERP and pupil changes (N = 21, 24, and 24) supported the hypothesized cognitive and emotional processes. Jokes were rated as more funny, moderately unpredictable, and comprehensible. They showed increased reading times of the final word compared to coherent endings. ERP data revealed semantic integration difficulties (N400), enhanced discourse processing effort (late left anterior negativity, LLAN), and an enhanced late frontal positivity (fP600), possibly reflecting the emotional outcome. The latter is supported by larger pupil dilations in response to joke endings in comparison to other endings and by positive correlations of pupil sizes and funniness ratings of the stimuli. Incoherent endings were rated as less funny, less predictable, and incomprehensible. They also showed increased reading times. The N400 was stronger and sustained but did not elicit emotion-related ERP and pupil responses. Together, our findings demonstrate jokespecific cognitive and emotional processing over time.

# **REGULATING OTHERS, BENEFITING THE SELF: THE CASE OF INTERPERSONAL INSTRUMENTAL EMOTION REGULATION**

#### Netzer, L., Van Kleef, G. & Tamir, M.

Do people manipulate the feelings of others in order to achieve their own goals? To test this, participants were told that they would play an aggressive computer game with another participant and that a high score could lead them to win a monetary prize. Participants in one condition were told that their score would be comprised of the number of enemies they eliminate in the game plus the number of enemies their partner eliminates. Participants in another condition were told that their score would be comprised of the number of enemies they eliminate in the game minus the number of enemies their partner eliminates. All participants were then given the opportunity to select emotion inducing stimuli (music and texts) for the other participant to listen to before playing the game. We predicted that participants would try to put their partner in an emotional state that would be most beneficial to their own performance. Consistent with this prediction, participants who stood to gain from the aggression of their partner were significantly more likely than those who stood to lose from this aggression to select anger-inducing stimuli for their partner to be exposed to before the game (studies 1 & 2). In addition this pattern of results was stronger the more participants believed anger to be useful in confrontational situations (study 2). These findings demonstrate that people can regulate the feelings of others in ways that promote their personal goal achievement, even when that requires making others feel unpleasant.

# THE MENTAL REPRESENTATION OF SMILES

#### Paulus, A., Rohr, M., Dotsch, R. & Wentura, D.

Even though smiles are seen as universal facial expressions, research shows that there exist various different kinds of smiles (e.g., affiliative smiles, shameful smiles). Accordingly, we suggest that there also exist different mental representations of smiles. However, which of the multitudes of representation is activated when people think about a smile? We assume that depending on social factors like the relationship to the (imagined) expresser, different representations are activated. These mental representations should differ primarily in respect to the communicated social meaning and not necessarily felt affect. Examining these hypotheses we influenced the relationship between perceiver and (imagined) expresser by manipulating group membership. Since the relationship to in-group members is typically more positive than the one to members of an out-group, we hypothesized that the mental representations of in-group smiles would express more benevolent social meaning but not more positive affect than the ones of out-group members. The mental representations of in-group and out-group smiles were unobtrusively assessed by employing a reverse correlation technique (e.g., Mangini & Biederman, 2004). The resulting visualizations indicated that mental representations of in-group smiles indeed express more benevolent intentions than those of out-group smiles. However, the affective content of these visualized smiles was not influenced by group membership. Importantly, the effect occurred even though participants were not instructed to attend to the nature of the smile, pointing to an automatic association between group membership and intention. The implication of this finding for the conceptualization of emotional expressions will be discussed.

### DWELLING ON THE PAST CAN MAKE MORE MISERABLE AND MORE BLESSED

#### Van Putten, M.

Research has by and large shown the negative effects of state orientation, that dwelling on past events (i.e., state orientation) leads to more negative emotions and less well-being than quickly getting over past events (i.e., action orientation). This past research has primarily focused on the negative effects of state orientation, how people cope with negative events and bad outcomes. The present research takes a new perspective and focuses on positive events with good outcomes. The idea was that, just as contemplating negative events enhances negative emotions, contemplating positive events would enhance positive emotions too. This is based findings in emotions literature, where just as contemplating bad outcomes or losses increases regret, disappointment and sadness, contemplating good outcomes can increase feeling lucky, or grateful. Three studies show that state orientation increases positive affect in positive situations. Study 1 consists of two scenarios in which an outcome turns out for the better or the worse. The results show that state-oriented participants show higher negative emotion scores in the conditions that turn out for the worse, but also higher positive emotion scores for situations that turn out for the better. Study 2 replicates this effect of positive emotions in a scenario study manipulating state orientation orientation. Finally, Study 3 replicates the effect of measured action orientation on positive emotions in a real life setting where participants receive windfall gains. A windfall gain made state oriented people happier, but not action-oriented people. These results and their implications are important in light of the action orientation and emotions literature. First, the effect that a contemplative, state-oriented mindset increases negative emotions was already wellestablished. These are the first studies showing that this same mindset increases positive emotions too. Second, this research shows an important and unexpected moderator for experiencing positive emotions.

28.03.2014, 16:30-18:30

#### Symposium 5.1

# NARRATIVE QUALITIES OF EMOTIONS

#### Habermas, T.

Most emotional experiences are told to others, and many of these emotional stories are even re-told to third persons (Rimé). Narrative is the text format that allows sharing emotional experiences. Narratives imitate the sequence of events and they normatively evaluate these events, both cognitively and emotionally. The emotion process (Frijda) and the normative narrative structure (Labov & Waletzky) are homologous: They start with a situation of normality which is interrupted by an event that brings a relevant imbalance that cannot easily be remedied. This complicating event evokes an emotional evaluation and leads to attempts to normalize the situation, which may succeed or fail. Narratives are among the most frequent emotion elicitors and are among the most frequently used means to express, communicate, and cope with emotions.

Therefore this symposium is dedicated to the role of narrative for emotion expression, representation, and elicitation. (1) Barbara Maier compares formal characteristics of narratives of scary and angering autobiographical experiences. She analyzes both representations of subjective perspectives by means of reported speech, evaluations, and mental verbs as well as an array of justifications for both emotions. She relates the preferential use of means to represent the subjective experience of the protagonist in fear narratives and the preferential use of justifications in anger narratives to the possibly intended effects in respective listeners. (2) Susanne Doell-Hentschker compares formal aspects of narratives of positive and negative daily emotional events with dream narratives and their relation to the emotional intensity of the reported events. Analyzing both evaluations and emotion words as well as the overall narrative structures, she finds that dream narratives contain more repeated attempts to solve a complication, and that emotional intensity correlates with presence of complication sections and of emotion words. (3) Cord Benecke analyzes the narrative context of crying in the naturalistic context of psychotherapy sessions. Narratives in the context of which patients cry are not only, as could be expected, sad stories, but also narratives about angering events and positive surprises. Crying patients do not differ on psychopathological measures from non-crying patients, but tend to report more intimacy and show less aggressive mimical emotions. (4) Tibor Polya analyzes the relationship of emotion intensity to formal temporal characteristics of autobiographical narratives about scary, angering, sad, pride-eliciting, and happy events. In addition to selfreported intensity of speaker emotion (cf. Doell-Hentschker) he also measured the physiological arousal of speakers when narrating. Emotion intensity decreases the use of temporal indications, and positive valence of events is related to temporally extended, continuous events. (5) Tilmann Habermas relates formal characteristics of narratives, not to the emotions of speakers, but of listener. Sad stimulus narratives with variations in the use of narrative perspectives are tested for their emotional impact on listeners, measuring self-report, physiological, and mimical reactions.

The talks reflect various parts of the basic communicative triad of speaker - narrative text - narrated event listener. Maier and Doell-Hentschker analyze formal characteristics of narratives depending on the kind of emotion-eliciting event they report. Benecke relates an expressive corporal reaction to the nature of the narrated events. The Polya and Habermas relate formal characteristics of narratives to the speakers' and listeners' emotions respectively. Various methods are used for eliciting/presenting narratives (oral, written), a variety of formal and content aspects of narratives are studied (evaluations, narrative structure; emotion quality and reality-status of narrated event), narratives regard various emotions (fear, anger, sadness, happiness), and emotions are measured with a variety of verbal and non-verbal methods.

The symposium proposes to use narratives both as a means and as an object of research in emotion research. Narrative is a format that links emotion processes in everyday verbal communication with emotion processes in reading and viewing both realistic and fictional narratives. Narrative invites to link psychological to sociological, literary, and film-aesthetic approaches to emotion.

# ANGER NARRATIVES VERSUS FEAR NARRATIVES – DIFFERENCES IN NARRATIVE **QUALITIES**

#### Maier. B.

Narratives of events that elicited anger and fear have been found to differ in the use of indirect speech (Habermas, Meier, & Mukhtar, 2009), and internal monologue. Whereas anger narratives contained more indirect speech and fear narratives contained more internal monologue. This pattern might be due to different purposes that both kinds of narratives serve. Anger narratives might serve to justify the narrator's experience of anger, whereas fear narratives might serve to increase suspense. The use of indirect speech in anger narratives might help the narrator to justify the anger by eliciting sympathy within the listener. However, the use of internal monologue in fear narratives might help the listener to see things from the narrator's point of view and thereby to increase suspense (Habermas et al., 2009). To further investigate these different purposes, the present study examined narrative qualities like indirect speech, internal monologue, specific and global evaluations, mental verbs, as well as indicators of justification of anger and fear narratives. Therefore, 42 participants narrated 4 personal events that elicited anger or fear respectively from the past 4 weeks and from the past 1 to 5 years. Anger narratives were expected to contain more indirect speech, more specific evaluations and more indicators of justification than fear narratives. Fear narratives were expected to contain more internal monologue, more global evaluations and more mental verbs than anger narratives. Hypotheses were partly confirmed. One to 5 year old anger narratives contained more indirect speech than fear narratives, whereas 1 to 5 year old fear narratives contained more internal monologue. Four week old anger narratives contained more indicators of justification than fear narratives. Anger and fear narratives differ in narrative qualities to elicit different processes in listeners that again might help the narrator to cope with the narrated event.

# **EMOTIONS IN DREAM AND EVERYDAY-LIFE NARRATIVES**

Döll-Hentschker, S., Messmann, C., Rüger, C. & Rode, M.

INTRODUCTION: Everyday autobiographical narratives have become of special interest for research in processes of emotion regulation. We expected that dream narratives are a special form of everyday-life narratives and are structured in the same way as Labov & Waletzky (1967) postulated for everyday narratives of personal experiences, containg the structral elements abstract, orientation, complication, evaluation, result, and coda. This narrative structure reflects an emotional process with the complication as climax. In addition we expected that negative experiences require more emotion regulation and evaluation to cope with them.

METHOD: A total of 77 female students (M age 23.7) wrote down their most positive and most negative experience every day for one week. They also wrote down all dreams they could remember for a period of two weeks. Valence of dream and intensity of experience were rated on five point likert-scales. A total of 1,078 daily experiences narratives and 638 dream narratives was collected. Narrative structure and emotions were coded .

RESULTS: First, dream narratives were structured similarly as daily experiences narratives, following the structure suggested by Labov & Waletzky (1967). However there were some differences in detail. Dream narratives more frequently contained more than one complication, they comprised more attempts to solve the complication, less frequently contained a results section, and overall less evaluations than did daily events narratives. Second, the rated intensity of the experience correlated with the frequency of complication and evaluation sections as well as with the frequency of emotion terms, especially fear and anger.

DISCUSSION: Dream reports follow a narrative structure. We suggest that the differences between dream and daily experiences narratives support the psychoanalytic notion that dreams serve to attempt to solve problems and conflicts.

The narrative structure reflects the increasing need for emotion regulation with increasing intensity of the experience and the corresponding higher frequency of anger and anxiety (more complications and evaluation).

### THE NARRATIVE CONTEXT OF CRYING

#### Benecke, C.

Crying is a common emotional phenomenon in humans. Nevertheless, research on crying is rare. Despite everyday-psychology, which relates crying primary to sad experiences, the underlying emotional processes and situational occasions are quite unclear.

We analyzed crying events during clinical interviews in 42 subjects with the qualitative content analysis (according to Mayring), and contrasted the narrative context of crying with structural equivalent narratives of non-crying subject with in the same study.

Crying appears not only within "sad stories", but also in other narrative contexts, e. g. "anger stories" or (unexpected) positive experiences. There are no systematic differences between crying and non-crying subjects, concerning diagnoses, disorder severity, or content of narratives. But non-crying subjects differ from crying subjects experiencing more aggressive emotional, showing more aggressive facial affective behavior, and experiencing less intimacy in relationships with others. Results will be discussed under the perspective of possible functions of crying.

# TEMPORAL STRUCTURE OF NARRATIVES AS AN INDICATOR OF THE RELIVING OF PAST EMOTIONAL EPISODES

### Polya, T.

Emotion research considers narratives of emotional episodes a rich source of information on past emotions. However, narrators may relive their past emotions while narrating them. The question of what information narratives convey on narrator's current emotions has received much less attention in emotion studies. This study addresses the question what temporal structure of narratives reveal about narrator's emotional state. The study included 75 participants. They were asked to recount emotional episodes applying a cue word paradigm with the following emotion category labels: Anger, Sadness, Joy, and Pride. Intensity and valence of the narrator's emotional state during narration were assessed by self-report and physiological measures. The temporal structure of narratives was reflected by two features of specific temporal reference and temporal unfolding. Specific temporal reference describes the date when the events had happened. Temporal unfolding means whether the event is described as an ongoing process or as it is completed. These two features were coded by automated linguistic analysis. The results show that specific temporal reference reflects the intensity and temporal unfolding reflects the valence of narrators' current emotions. The results of a regression analysis show that when the narrator relives the past emotional episode intensively the narrative contains less temporal reference. And when the narrator relives it with a positive valence the narrative contains more events described as an ongoing process. The results are interpreted in a framework based on elaborating the idea that emotions and narratives have analogue temporal structures.

# HOW NARRATIVE PERSPECTIVE INFLUENCES EMPATHETIC AND INTERACTIONAL LISTENER RESPONSES

### Habermas, T., Foerster, J., Lingg, K. & Bongard, S.

How does narrative form succeed in influencing reader or listener emotional responses? One formal element on narrative is the representation of evaluative perspectives. Various personal perspectives may be represented (narrator/main protagonist, other protagonists, others not present in the story, etc.) as well as different temporal perspectives (past perspectives from the narrated time, present perspectives of the narrating time, hypothetical, future perspectives). It has been hypothesized that limiting perspective representation to the past protagonist, as well as the use of means of dramatic speech such as direct speech, historic present, and the shifting of the origo of deictic expressions to the past increase the reader's/listener's empathy with the past protagonist. Furthermore it has been hypothesized that a generally sparse representation of perspectives decreases empathetic emotions and increases interactional emotions directed towards the present narrator. Questionnaire studies have partially validated these predictions (Habermas & Diel, 2010; Polya, Laszlo, & Forgas, 2005). In the present study we attempt to replicate our earlier findings with a more naturalistic medium of presentation of narratives and a larger array of emotion measures. Using the same stimulus narratives as before (loss narratives), we presented the narratives orally via an audiorecording, and measured listener emotion not only via written self-report, but also via physiological parameters, facial mimics, and two projective TAT narratives. First results will be presented. We will discuss the feasibility of audiorecorings of narratives as an attempt to use standardized narrative stimulus material that is closer to everyday interactions than is the reading of narrative material.

### 28.03.2014, 16:30-18:30

#### Symposium 5.2

# SOCIAL DYNAMICS OF EMOTIONS IN GROUPS AND TEAMS

#### Niven, K., Delvaux, E., Van Kleef, G., Lehmann-Willenbrock, N. & Lei, Z.

In this symposium, we will present research on emotional processes in groups and teams. There has been a surge of interest in group emotions, particularly emotions in the work place, mostly because group emotions are thought to affect group outcomes significantly (e.g., Bartel & Saavedra, 2000; George, 1990; Totterdell, Briner, Teuchmann & Kellett, 1998). Whereas there is evidence in support of the link between group emotions and outcomes, most of the existing research on these group emotions is cross-sectional and static, and therefore, has failed to yield insight in the processes and mechanisms underlying group emotions.

The research presented in this symposium constitutes a more theoretical approach to group processes. First, all contributions to this symposium have in common that they study emotions in groups longitudinally, and thus focus on dynamic emotion processes over time, rather than on static outcomes. Second, all contributions to this symposium show that emotional contagion is an insufficient mechanism to account for emotional processes in groups: Both the spreading of emotions in groups and the group outcomes of emotions and emotional coping are dependent on the meaning making of group members. Third, all contributions focus on the conditions under which emotions and emotional interactions have positive outcomes. In doing so, they test specific theoretical predictions about the processes that link emotions to positive outcomes.

In a first paper, Niven and colleagues show how, over time, individuals' strategies of 'interpersonal emotion regulation' are differentially associated with popularity. In some cases 'interpersonal emotion regulation' strategies derive their meaning from the personality of the regulator (which suggests that not the behaviors themselves but the interpretations by others are responsible for their effects). In a second paper, Delvaux and colleagues show in two longitudinal studies on pride that whether emotions spread among group members depends on the emotions' meaning to the group: Pride of group did converge, but pride of self did not. Additionally, pride of group and pride of self reliably related to collective efficacy and self-efficacy respectively. In a third paper, Van Kleef and colleagues studied the role of coaches' emotions, and found that the emotions of a coach influence the emotions of the players at a later point in time, and lead to increased motivation; however, the effect is stronger, when coaches' emotions were judged appropriate by the team. In a fourth paper, Lehmann-Willenbrock and colleagues show that humor patterns (humor followed by laughter) in teams predicted objective team performance, even two years later. However, the team-level job insecurity climate determined the direction of this link, suggesting once again that the meaning of the emotion determines its outcome. The fifth paper examines the link between peer affect and individual affect in problem solving teams and its relation to solution generation. The results show that peer affect predicts individual affect across time, and that this relationship is moderated by individual job satisfaction and momentary group affect dispersion. The findings also suggest there is an inverted-U-shaped relationship between peer affective valence and individual solution generation.

# **BECOMING POPULAR: INTERPERSONAL EMOTION REGULATION PREDICTS CENTRALITY IN NEW SOCIAL NETWORKS**

#### Niven, K., Block, P., Van Der Lowe, I. & Mansell, W.

Building strong relationships is crucial for satisfaction and success, especially when entering new social contexts (Baumeister & Leary, 1995; Morrison, 2002; Sparrowe, Liden, Wayne & Kraimer, 2001). But how do people make new connections? An emerging body of research provides evidence that attempting to improve other people's feelings may boost the quality of existing relationships (Niven, Holman, & Totterdell, 2012), suggesting that this may prove a promising way for people to boost their popularity. The aim of the present paper is to investigate whether engaging in this process of 'interpersonal emotion regulation' can help people to form new relationships during socialization into a group. We contrasted two distinct types of strategies: cognitive (which challenge a person's thoughts about his or her situation or feelings) and behavioral (which use behavior to reassure or comfort a person), and further explored whether these strategies were differentially effective depending on the agreeableness of their user.

Our first study was a longitudinal social network study following new groups of students on 1-year Masters courses, from a starting point of not knowing each other for a twelve-week period. The results indicated that behavioral strategies predict growth in popularity, as indicated by other group members' reports of spending time with the person, both in work and social interactions. Cognitive strategies, in contrast, only predicted an increase in social popularity, and only when they were used by people high in agreeableness. Our second study replicated these effects using a similar study design with a single 1-year Masters course, except that use of cognitive versus behavioral strategies (versus no strategies) was experimentally manipulated using implementation intentions. Together, the results of the studies have implications for our understanding of the role played by affect in the formation of new relationships, and the factors guiding evolution of social groups and networks.

# WE ARE PRIDE OF US, I AM PRIDE OF MYSELF: TWO LONGITUDINAL STUDIES IN SMALL, INTERACTIVE TASK GROUPS

#### Delvaux, E., Meeussen, L. & Mesquita, B.

Indirect evidence suggests that the emotions of group members converge over time. However, most research on emotions in task groups is cross-sectional, inferring convergence from a greater-than-random similarity in the emotions of group members. Moreover, it is not clear whether the underlying process of emotional convergence is one of contagion or appraisal. Put differently: Is just being exposed to other group members' emotions enough to assimilate over time or do group members' emotions only converge when the emotions of the other group members convey relevant information?

In the current studies, we propose that only those emotions that are relevant and important to the group will become spread among group members. To test this hypothesis, we compared group members' feelings of pride about themselves and about their group in two longitudinal designs. In the first study, 295 students of 68 interactive task groups were followed at four moments. Group members mutually influenced each other's pride about their group across time, but not their pride about themselves. Also, group members' pride about their group aligned at each time point, whereas their pride about themselves did not. Finally, feelings of pride about oneself and pride about the group reliably related to self-efficacy respectively collective efficacy. In the second study, 189 students of 27 interactive task groups were followed at three moments. As in the previous study, group members' pride about their group aligned at each time point, whereas their pride about themselves did not. Moreover, group members adjusted their pride about the group to those members they perceive as more influential to the group. This effect was not present for pride about oneself. Together, these findings provide evidence that group members converge only in those emotions that are relevant and important to the group.

# THE INFLUENCE OF SPORTS COACHES' EMOTIONAL EXPRESSIONS ON TEAM **MEMBERS' EMOTIONS, MOTIVATION, AND PERFORMANCE**

# Van Kleef, G., Cheshin, A. & Koning, L.

Sports teams are a breeding ground for emotions. Besides the obvious emotional significance of winning and losing, team members and coaches alike may experience a plethora of emotions stemming from dynamics within the team, such as failure to effectively coordinate efforts or success at jointly executing a predetermined tactical plan. Anecdotal observations suggest that emotional expressions play a pivotal role in the coaching process. Interestingly, however, surprisingly little is known about how sports coaches' emotional expressions influence the performance of their teams. This lack of understanding is especially intriguing if one considers how much money is involved in professional sports competitions nowadays.

In this project we aim to shed initial light on the role of sports coaches' emotions in team sports. We conducted a field study among 268 baseball and softball players and 41 coaches who were active in various teams that played at different levels in the Dutch league. Immediately after each game we obtained subjective ratings from both coaches and players pertaining to various aspects of emotion and motivation as well as objective outcome data. The data indicate that coaches' emotions indeed play an important role in sports teams. First, the more coaches indicated deliberately showing their emotions to motivate their players, the greater the motivation reported by the players. Second, the emotions of the coach were significantly linked with the emotions of the team members, even when controlling for the outcome of the game. Third, the more appropriate players deemed the emotional expressions of their coach during the game, the higher the motivation reported by the players, the more points they scored as a team, and the fewer errors they made. These findings point to the pervasive social consequences of emotional expressions and provide preliminary insight into how emotions may be used to boost (sports) team performance.

# HOW AND WHEN HUMOR PATTERNS EMERGE AND IMPACT TEAM PERFORMANCE

### Lehmann-Willenbrock, N. & Allen, J.

Research on humor in organizations is limited and has not considered the social context in which humor occurs. One such social setting that most of us experience on a daily basis concerns the team context. Building on Hackman's theory of team effectiveness and recent theorizing about the humor-effectiveness link in teams, this study seeks to increase our understanding of the function and effects of humor in dynamic team settings. Specifically, we examine humor and laughter as they emerge and unfold (i.e., behavioral patterns) in real team contexts.

We videotaped and coded humor and laughter in 54 teams during regular team meetings. Performance ratings were obtained immediately following the recorded team meetings as well as at a later time point from the teams' supervisors. Lag sequential analysis identified emergent humor-laughter patterns. For example, a humor pattern can consist of a humorous statement (e.g. a joke), followed by laughter, followed by another humorous statement or even three humorous statement consecutively. These patterns (but not humor alone) positively predicted objective team performance, both immediately and two years later. Team-level job insecurity climate was identified as a boundary condition: In low job insecurity climate conditions, humor patterns were positively linked to performance, whereas in high job insecurity climate conditions, humor patterns were negatively linked to performance. The role of job insecurity as a boundary condition persisted at both time points. These findings underscore the importance of studying dynamic team interaction and considering team-level boundary conditions over time.

# **CONTAGIOUS PEERS: PEER AFFECTIVE VALENCE AS AN ASSET OR A LIABILITY IN PROBLEM SOLVING TEAMS?**

#### Lei, Z. & Lehmann-Willenbrock, N.

Solving every-day problems is vital to the success of contemporary organizations and appears to be an affectively charged event. While past breakthroughs sometimes come from a single genius like da Vinci and Thomas Edison, today most business ideas and solutions draw on many contributions and much of problem solving is done in work teams. Anecdotal evidence suggests that team members not only bring ideas but also emotions into the problem solving process. As such, a growing literature has examined the relationship between shared emotions and team outcomes, including coordination, cooperation, conflicts and performance, at single points in time. But little is known how naturally occurring affective experiences in the flow of team interactions might relate to team members' solution generation, and there is a dearth of research on the relationship between shared affect and solution generation in work teams over time.

Drawing on the social contagion theory, this study explores how localized peer affect relates to a given team member's individual affect and solution generation in the flow of team interactions. Using video data from the meeting interactions of 23 problem solving teams, we examined the temporal dynamics and contingencies of peer affective valence (positivity-negativity) and its effects on individual affective valence and solution generation. Time-lagged analyses of panel data indicate that peer affective valence relates positively to individual affective valence; this relationship is, however, weakened by individual job satisfaction and momentary group affect dispersion. The results also indicate an inverted-U-shaped relationship between peer affective valence and individual solution generation. Our results not only concur with the social contagion view of affect in groups but also provide empirical support for the contention that peer affect fosters emotions and behaviors that may ultimately erode task performance.

#### 28.03.2014, 16:30-18:00

#### Symposium 5.3

# AFFECT ACROSS THE LIFE-SPAN: EMOTIONAL COMPETENCIES AND DYNAMICS FROM ADOLESCENCE TO OLD AGE

#### Blanke, E., Luong, G., Wrzus, C., Klipker, K. & Riediger, M.

Emotions play vital roles in daily life. They can express important information to others (e.g., that one is upset) and motivate action tendencies (e.g., to flee from danger when afraid). Some emotional experiences and situations, however, are not particularly adaptive. For example, misreading others' emotions, as well as experiencing high and prolonged levels of distress, are associated with negative psychosocial consequences. Our symposium examines emotional competencies (e.g., how accurate people are in their judgments of others' thoughts and feelings) and dynamics (e.g., emotional responses and fluctuations in emotional experiences) from a life-span perspective to understand how these processes may change with age.

First, Blanke and colleagues will present work on age differences in empathic accuracy – the degree to which individuals are able to correctly identify another person's thoughts and feelings – and their social implications. To test whether the association between empathic accuracy and social adjustment may be moderated by age, Blanke and colleagues had 100 younger (20-31 years old) and 100 older (70-80 years old) women engage in a videotaped zero-acquaintance conversation in either same- or mixed-age dyads. Participants later reviewed the videotapes and rated their own and their interaction partner's thoughts and feelings. As expected, older adults were less empathically accurate than younger adults in this real life interaction. Implications of empathic accuracy for social implications were qualified both by participants' age and the accuracy facet (i.e., thoughts or feelings) considered.

Given that negative affect is associated with poorer health and well-being. Luong and colleagues examined the degree to which appraisals of negative affect may dampen these links. In a life-span sample ranging from 12-88 years old, participants completed interviews assessing their general appraisals of negative affect (e.g., as helpful, useful, etc.). Additionally, participants completed a mobile phone-based experience sampling method (ESM) in which they reported on their momentary emotional experiences and whether hassles (unpleasant events) had occurred throughout the day. The results showed that, as expected, participants with more positive appraisals of negative affect showed attenuated links between mean negative affect during the ESM and self-reported health and life satisfaction, as well as less negative affect reactivity to hassles in everyday life.

To further understand age differences in affective dynamics, Wrzus and colleagues examined 92 participants' (age range14-83) heart rate and negative affect reactivity to, and recovery from, a social-cognitive laboratory stressor. Results showed that heart rate reactivity decreased, but heart rate recovery time increased with age. In contrast, no significant age differences in reactivity and recovery regarding negative affect were observed. These findings confirm that reactivity to, and recovery from, emotional strain are distinct components of affect dynamics.

Affective dynamics can also be characterized by the amount of variability (i.e., fluctuation) in affective experiences over time. Adolescents are known to exhibit high levels of affective variability. To disentangle possible sources of affective variability among adolescents, Klipker and colleagues had 158 participants (10-20 years old) complete laboratory assessments of emotion sensitivity, as indexed by emotional attention and appraisal processes. Additionally, participants completed a mobile phone-based ESM assessing momentary emotional experiences. As expected, emotional sensitivity to social information (e.g., attention to faces), as compared to other types of emotional information (e.g., words, pictures), was related to greater affective variability and more negatively-toned emotional experiences in daily life.

Riediger and colleagues build on this work by examining longitudinal change in affective variability over the course of six years in a life-span sample ranging from 12-88 years of age. Although developmental psychologists have posited that affective variability changes over time, and that this change may be most pronounced for individuals of particular ages (e.g., adolescents), few studies have examined age differences in longitudinal change in affective variability. Furthermore, little is known about potential longer-term developmental-regulatory functions of everyday affective experiences. Using longitudinal data from an experience sampling study, they found that the patterns of longitudinal change in affective experiences and in affective variability differ between individuals from different age groups and explore possible implications for longer-term developmental adjustment.

Together, the presentations underscore the importance of examining affective competencies and dynamics from a life-span developmental perspective. The findings support the view that socioemotional development is life-long, multi-directional, and multi-faceted.

# **READING OTHERS' THOUGHTS AND FEELINGS – AGE DIFFERENCES IN SOCIAL IMPLICATIONS**

### Blanke, E., Rauers, A. & Riediger, M.

Empathic accuracy is the ability to correctly identify others' thoughts and feelings. Past laboratory experiments suggest that this important ability decreases with age. However, little is known about age differences in the association between empathic accuracy and related social implications, such as success in social interactions. We hypothesized that social implications of empathic accuracy depend on the interaction partners' age.

In our study, 100 young (20-31 years), old (70-80 years), and age-mixed female dyads were videotaped during zero-acquaintance conversations. Afterwards, both interaction partners evaluated the conversation. Then they reviewed the video and rated their own and their interaction partner's thoughts and feelings at 8 time points during the conversation. In a second session, we measured social adjustment and covariates using self-ratings and informants' ratings.

As expected, older adults were less empathically accurate than younger adults in this real life interaction. Empathic accuracy for thoughts and feelings uniquely contributed to predicting social implications. Implications of empathic accuracy for social implications were qualified both by participants' age and the accuracy facet considered.

# APPRAISALS OF NEGATIVE AFFECT DAMPEN THE LINKS BETWEEN NEGATIVE **AFFECT AND WELL-BEING**

### Luong, G., Riediger, M., Wrzus, C. & Wagner, G.

High levels of negative affect have been linked to poorer health and well-being. For some individuals, however, these associations may be more tenuous. Individuals differ in their appraisals of negative affect as helpful, useful, meaningful, and comfortable. More positive appraisals of negative affect may therefore dampen the associations between negative affect and poorer health and well-being. To examine this possibility, 397 participants (12-88 years old) completed interviews assessing their general appraisals of negative emotions, with higher scores denoting more positive appraisals. In addition, participants completed a mobile phone-based experience sampling procedure whereby they reported their momentary emotional experience and the occurrence of hassles (i.e., unpleasant events) throughout the day at various intervals across three weeks. The results showed that for individuals with the most positive appraisals of negative affect, high levels of negative affect during the experience sampling period were not related to self-reported health or life satisfaction. Conversely, for individuals with less positive appraisals of negative affect, higher mean levels of negative affect were related to poorer self-reported health and lower life satisfaction, even when controlling for age and gender. Additionally, individuals with more positive appraisals of negative affect showed attenuated negative affect reactivity (i.e., smaller increases in negative affect) to daily hassles. These findings support the view that there are individual and contextual differences in the role and function of negative affect. Under certain situations and more generally for particular individuals, negative affect may be less strongly related to poorer health and well-being.

# AGE-RELATED DIFFERENCES IN REACTIVITY TO AND RECOVERY FROM EMOTIONAL STRAIN: DISTINCT PATTERNS FOR NEGATIVE AFFECT AND HEART RATE

### Wrzus, C., Müller, V., Wagner, G., Lindenberger, U. & Riediger, M.

We propose that a comprehensive understanding of age differences in affective responses to emotional situations requires the distinction of two components of affect dynamics: reactivity, the deviation from a person's baseline, and recovery, the return to this baseline. The present study demonstrates the utility of this approach with a focus on age differences in responses of negative affect and heart rate to emotional strain in 92 participants aged 14 to 83. Emotional strain was elicited with an adaptive social-cognitive stress task. Participants' negative affect and heart rate were measured throughout the task. Results showed that heart rate reactivity decreased, but heart rate recovery time increased with age. In contrast, no significant age differences in reactivity and recovery regarding negative affect were observed. These findings confirm that reactivity to, and recovery from, emotional strain are distinct components of affect dynamics. They underscore the multidirectional nature of age differences in affective processes.

# WHAT YOU SEE IS WHAT YOU FEEL: EMOTION SENSITIVITY PREDICTS TEENS DAILY **EMOTIONS**

### Klipker, K., Wrzus, C., Rauers, A. & Riediger, M.

Adolescence is described as a developmental period with unique emotional characteristics. Adolescents' emotional experiences have been shown to be more intense, more rapidly changing, and more negatively toned, as compared to other stages of life. However, possible processes contributing to age differences in emotional experiences lack sufficient empirical investigation. We hypothesize (a) that adolescents information processing is more emotionally toned, i.e., indicating greater emotion sensitivity, and (b) that this higher emotion sensitivity accounts for the unique emotional characteristics in adolescence.

158 participants aged 10 to 20 years took part in a study comprising laboratory sessions and an extensive mobilephone based experience sampling period. During the 2-week long experience-sampling phase, participants indicated six times a day, among other things, how they were currently feeling using a set of emotion adjectives. To assess an individuals' global emotion sensitivity, we investigated emotional attention and appraisal processes in the laboratory. An individuals' attention towards emotional stimuli was measured using an emotional stroop, an attentional dot probe, and a memory task. An individuals' appraisal of emotionally-neutral stimuli was measured with an emotion rating task of neutral pictures, faces and words. Results support the assumption that higher emotion sensitivity towards faces, but not towards pictures or words in attention and appraisal tasks, are related to the unique emotion characteristics in adolescence: Individuals' with higher emotional attention and appraisal bias showed more negatively-toned and more varying affective experiences in their daily life. Results are discussed in light of the increasing importance of socially relevant information in adolescence.

# LONGITUDINAL CHANGE IN EVERYDAY AFFECTIVE EXPERIENCES AND VARIABILITY: FROM ADOLESCENCE TO OLD AGE

Riediger, M., Voelkle, M., Luong, G., Wrzus, C. & Wagner, G.

Evidence suggests that everyday emotional experiences differ between individuals from different age groups. Older adults, for example, typically report more positive and less fluctuating affective experiences in their everyday lives than younger individuals do. Cross-sectional age differences, however, do not necessarily correspond to actual aging-related changes within persons over time. Yet, to date, longitudinal evidence about within-person change of everyday affective experiences over time in individuals from different age groups is scarce. Furthermore, little is known about potential developmental-regulatory functions of everyday affective experiences, that is, their associations with indicators of adaptive development assessed at later points in time. We conducted a longitudinal experience-sampling study in an age-heterogeneous sample to address these questions. Momentary affective experiences were assessed repeatedly while participants (12-88 years old) pursued their normal daily routines. Participants completed up to four waves of these experience-sampling assessments within about 6 years. Results indicate that the patterns of longitudinal change in affective experiences and in affective variability differ between individuals from different age groups. We explore possible implications for individuals' longer-term developmental adjustment and discuss theoretical implications for our understanding of emotional development from youth to old age.

28.03.2014, 16:30-18:30

Symposium 5.4

# "I FEEL BETTER BUT I DON'T KNOW WHY": IMPLICIT EMOTION REGULATION AS A **KEY TO EMOTIONAL ADAPTATION**

### Schwager, S., Vogt, J., Webb, T., Jostmann, N. & Koole, S.

People frequently tamper with the natural course of their emotions. Such emotion regulation processes have been traditionally conceived as explicit, conscious, intentional, and effortful processes (e.g., suppression of emotional thoughts and expressions). Although explicit emotion regulation efforts often pay off, people can only engage in explicit emotion regulation when they have sufficient motivation and cognitive capacity to do so. Moreover, explicit emotion regulation can easily backfire, because awareness of one's desire to change one's perspective and to bias information may undermine the credibility of the resulting beliefs and appraisals (Koole & Rothermund, 2011).

Fortunately, people's emotion-regulatory arsenal is not limited to explicit strategies. Indeed, a growing literature suggests that emotion regulation can also operate at implicit levels (Koole & Rothermund, 2011). Whereas Freudian notions treated the unconscious as shortsighted and as a source of pathological symptoms, modern research has portrayed implicit emotion regulation as a largely beneficial process. According to modern theories, implicit emotion regulation processes warrant flexibility and balance in emotional functioning (Koole & Rothermund, 2011; Rothermund, 2011). In the present symposium, we expand on this newly emerging perspective through various contributions that highlight the benefits of implicit emotion regulation for psychological health and wellbeing.

Schwager and Rothermund will discuss counter-regulation theory (Rothermund, Voss, & Wentura, 2008), a perspective for understanding the role of implicit emotion regulation in adaptive emotional functioning. These authors will further present their latest research on counter-regulation processes, which highlights their dynamic role in affective processing. Several studies showed that counter-regulation only occurs for "hot" emotional states of high affective intensity that comprise a need for regulation but not for "cold" emotions referring to situations for which a stable emotional appraisal has already been established.

Vogt will highlight the goal-dependent nature of implicit emotion regulation. More specifically, Vogt proposes that attentional processes of implicit emotion regulation are influenced by regulatory goals and control beliefs that individuals hold with respect to a critical situation. According to Vogt, people automatically allocate attention to signs of threat if the current situation provides sufficient means to fight the threat and people are thus prepared to confront the challenge that is posed by the threatening situation. On the other hand, if an active control is not possible, automatic processing of the respective stimuli decreases, indicating some kind of "perceptual defense". In support of this theoretical model, Vogt will present three experiments that examined the dynamic allocation of attention in the context of processing threatening or disgusting stimuli.

Implicit emotion regulation presumably depends on automatic, overlearned skills. Webb, Christou-Champi, and Farrow will consider the acquisition of implicit emotion regulation skills. These researchers examined whether implicit emotion regulation skills can be improved through structured training. Compared to two control groups, reappraisal training improved and automatized emotion regulation processes. This was reflected in a shorter time needed to down-regulate negative affect and reduced cardiovascular effort.

Jostmann and Sauter will consider how implicit emotion regulation may modulate emotional contagion of auditory cues. In two studies, participants listened to a neutral text spoken in a happy or sad voice. State-oriented individuals' moods were not influenced by the voices. By contrast, action-oriented individuals' moods became more positive after listening to a happy voice. According to Jostmann and Sauter, action-oriented individuals spontaneously use incidental affective cues to motivate themselves to perform difficult tasks. These findings are discussed in relation to prior research linking action orientation to more effective implicit emotion regulation (Jostmann et al., 2011; Koole & Jostmann, 2004).

Koole, Veenstra Schneider, Bushman, and Domachowska propose that implicit cues from the body may regulate anger and aggression. Specifically, embodied avoidance cues may automatically inhibit the motivational impulse to feel angry and aggress. In line with this reasoning, five studies showed that embodied experiences associated with avoidance (as avoidance movements or darkness) inhibit anger and aggression, especially among individuals with chronic anger management problems. These effects were most pronounced under high cognitive load, suggesting that avoidance cues may implicitly down-regulate anger and aggression.

Together, the various contributions to this symposium demonstrate the importance of implicit emotion regulation across different emotions (disgust, happiness, anger) and different channels of emotional responding (attention, physiology, experience, behavior). Implicit emotion regulation thus appears to play a vital adaptive role in people's emotional lives.

# ON THE DYNAMICS OF IMPLICIT EMOTION REGULATION: COUNTER-REGULATION AFTER REMEMBERING EVENTS OF HIGH BUT NOT OF LOW EMOTIONAL INTENSITY

### Schwager, S. & Rothermund, K.

Counter-regulation reflects an attention allocation to stimuli of opposite valence to a current emotional event and is assumed to be a dynamic and flexible process which does not occur per se but only if there is a need for regulation, that is, if one has not yet psychologically adapted to the emotional experience (Rothermund, Voss, & Wentura, 2008). To test this assumption valence biases in attention allocation were assessed after remembering positive or negative personal events that were either still emotionally hot or to which the person had already adapted psychologically. Differences regarding the current state of psychological adjustment were manipulated experimentally by instructing participants to recall distant vs. recent events (Exp. 1) or affectively hot events vs. events to which the person had accommodated already (Exp. 2). Valence biases in affective processing were measured with a valence search task (Rothermund et al., 2011). In line with the hypothesis emotional counterregulation (i.e. affective incongruency effects) was elicited by remembering affectively hot events, whereas congruency effects (i.e. attention allocation to stimuli of the same valence as the emotional event) were obtained for events for which a final appraisal had already been established. Taken together, these results support the flexibility and adaptivity of attentional counter-regulation and thus implicit emotion regulatory processes.

# AUTOMATIC ATTENTIONAL PROCESSES SERVE THE REGULATION OF AVERSIVE **EMOTIONS**

### Vogt, J.

How do people's attempts to regulate negative emotions impact what attracts their attention? In this presentation, I will argue that automatic attentional processes support people's efforts to attenuate negative emotional states. More specifically, I suggest that the specific regulatory goal at stake will determine the automatic allocation of attention. For example, attempts to suppress a negative emotion should cause attention away from negative events. In contrast, aversive events such as threat should grab attention when people aim to fight and master it. Importantly, in this case, also means that allow to fight the threat should attract attention. In Experiment 1 and 2, participants were presented with an imminent threat but were also provided with safety signals, that is, 'weapons' that permitted to fight the threat. The results of a cueing paradigm revealed that attention was automatically deployed towards signals of threat. Importantly, the safety signals that represented the weapons permitting to fight threat also grabbed attention automatically. The relative instrumentality of safety and threat signals in order to fight threat determined which signal gained attentional priority. Finally, Experiment 3 investigated whether suppressing disgust causes people to become blind towards disgusting images. Supporting this assumption, suppressing disgust caused attentional avoidance of disgusting stimuli but only when effective distracters were present.

# AUTOMATIC CONTROL OF NEGATIVE EMOTIONS: EVIDENCE THAT STRUCTURED PRACTICE INCREASES THE EFFICIENCY OF EMOTION REGULATION

# Webb, T., Christou-Champi, S. & Farrow, T.

OBJECTIVES: The effortful nature of many forms of emotion regulation (ER) may lead to regulation being inefficient and, potentially, ineffective. The present research examined whether structured practice could promote efficient ER.

METHODS: During three training sessions (150 trials), participants were presented with images designed to elicit negative emotions (i.e., images that depicted injuries) and asked either to 'attend' to the images (control condition) or to 'reappraise' their emotional response to the images (ER condition). A further group of participants did not participate in training, but only completed follow-up measures. The efficiency of ER was measured via the time taken to regulate emotions and heart rate variability during training. Two weeks later, participants watched five short films designed to elicit negative emotions (without explicit ER instructions). We measured the emotional impact of the films and the extent to which participants reported that ER was habitual and automatic (as measured by the Self-Report Habit Index).

RESULTS: Participants who completed training in reappraisal showed successful down-regulation of negative affect while decreasing the time needed to apply ER and the amount of cardiovascular effort invested in ER. Furthermore, participants who completed training were able to regulate their (negative) emotions in the absence of explicit instructions two weeks later, indicating that negative events now elicited ER in a spontaneous manner. Participants who completed training also reported being more habitual and automatic in their application of reappraisal than participants who did not receive training.

CONCLUSIONS: These findings indicate that structured practice can facilitate efficient control of negative emotions and that these effects persist beyond the end of training. Future research might consider whether incorporating structured practice into computerised self-help packages could promote resilience among professionals who might benefit from more automatic forms of ER, such as emergency room staff.

# **GUIDED BY VOICES: ACTION VERSUS STATE ORIENTATION MODERATES MOOD CONTAGION BY AUDITORY CUES**

#### Jostmann, N. & Sauter, D.

People's moods often become positive when they are listening to a happy voice rather than a sad voice, a phenomenon that is known as 'mood contagion' (Neumann & Srack, 2000). Although mood contagion is traditionally considered purely automatic, we propose that mood contagion is modulated by self-regulatory processes. Specifically, we suggest that the verbal contents of what is being said may overshadow the affective connotation of a voice, so that additional attention regulation is often required to detect which mood the voice conveys. We further hypothesize that action-oriented individuals may strategically use this mechanism to motivate themselves to perform demanding tasks. To test this reasoning, we conducted two studies in which participants listened to a difficult philosophical text spoken in a happy or sad voice. The moods of individuals high on action orientation became more positive after listening to happy voice rather than the sad voice. By contrast, the moods of individuals low on action orientation were not influenced by the voices, presumably because they were distracted by the text. These findings are consistent with prior research linking action orientation to implicit emotion regulation skills (Jostmann et al., 2011; Koole & Jostmann, 2004).

# **EMBODIED ANGER MANAGEMENT: BODILY EXPERIENCES ASSOCIATED WITH** AVOIDANCE IMPLICITLY REDUCE ANGER AND AGGRESSION AMONG INDIVIDUALS WITH HIGH TRAIT ANGER

### Koole, S., Veenstra, L., Veenstra, I., Bushman, B. & Domachowska, I.

Anger is linked to approach motivation (Carver & Harmon-Jones, 2008). Because approach motivation is dampened by avoidance motivation, embodied experiences associated with avoidance may down-regulate anger. We propose that such embodied anger management may occur implicitly, without conscious intentions or effort. Moreover, embodied anger management might be especially helpful for individuals chronically disposed towards anger. In Studies 1-3, we manipulated embodied experiences associated with approach and avoidance while participants were reading a potentially anger-evoking scenario. As expected, participants high in trait anger responded with less anger to a provocation when making avoidance movements (Study 1), in a dark environment (Study 2), leaning backwards (Study 3) compared to when trait-angry participants made approach movements, were in a well-lit environment, sat straight, or leaned forwards. In Studies 4 and 5, we manipulated approach and avoidance movements while participants received insulting feedback, and participants were given the opportunity to retaliate by showing aversive pictures to the person who insulted them (Study 4), or by blasting this person with white noise (Study 5). In both studies, embodied avoidance cues reduced behavioral aggression among high traitanger participants, an effect that was most pronounced under high cognitive load (Study 5). No such effects were observed among participants low in trait anger. Thus, embodied motivational states may implicitly regulate anger and aggression, particularly among individuals with chronic anger management issues.

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# NOTES

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#### Wednesday, March 26

- **14:00-18:00** Unter den Linden 6 <u>Entrance Audimax</u>, *Registration Open*
- **16:00-18:00** Unter den Linden 6 <u>Entrance Audimax</u>, *Conducted City Tour*

#### Thursday, March 27

- 8:00-18:00 Dorotheenstraße 24 Foyer, Registration Open
  9:00-10:30 Unter den Linden 6 Audimax, Key Note I, EMOTIONAL CONTROL OF PERCEPTION AND BRAIN STATES, Patrik Vuilleumier
- 10:30-11:00 Dorotheenstraße 24 Foyer, Coffee Break
- 11:00-13:00 Dorotheenstraße 24 <u>Room 1.101</u>, *Symposium 1.1*, WHY HUMANS CRY: THE FUNCTIONS OF TEARS
- **11:00-13:00** Dorotheenstraße 24 <u>Room 1.102</u>, *Symposium 1.2*, COLLECTIVE EMOTIONS AND EMOTIONS IN COLLECTIVE CONTEXT
- **11:00-13:00** Dorotheenstraße 24 <u>Room 1.103</u>, *Symposium 1.3*, METHODOLOGICAL ADVANCES IN CONTEMPORARY EMOTION RESEARCH
- **11:00-13:00** Dorotheenstraße 24 Room 1.204, *Paper Session 1.1*, "EMOTION THEORY"
- **11:00-13:00** Dorotheenstraße 24 <u>Room 1.205</u>, *Symposium 1.4*, FEAR AND LOATHING AND COGNITION: THE IMPACT OF ANXIETY ON PERCEPTION, LEARNING AND MEMORY
- **13:00-14:30** Unter den Linden 6 <u>Senatssaal</u>, *Lunch and Poster Session I*
- **14:30-16:30** Dorotheenstraße 24 <u>Room 1.101</u>, *Symposium 2.1*, ATTACHMENT INSECURITY AND SOCIAL EMOTION PERCEPTION
- 14:30-16:30 Dorotheenstraße 24 <u>Room 1.102</u>, *Symposium 2.2*, THE GRID PARADIGM: A PRINCIPLED MULTIDISCIPLINARY APPROACH TO ASSESS THE MEANING OF EMOTION WORDS
- **14:30-16:30** Dorotheenstraße 24 <u>Room 1.103</u>, *Symposium 2.3*, THE POSITIVE SIDE OF SHAME
- **14:30-16:30** DOROTHEENSTRASSE 24 <u>Room 1.204</u>, *Symposium 2.4*, ADVANCES IN UNDERSTANDING DEPRESSIVE RUMINATION
- 14:30-16:30 Dorotheenstraße 24 <u>Room 1.205</u>, *Paper Session 2.1*, "SELF REGULATION"
- 16:30-17:00 Dorotheenstraße 24 Foyer, Coffee Break
- 17:00-18:00 Unter den Linden 6 <u>Audimax</u>, *Key Note II*, PROTESTERS AS "PASSIONATE ECONOMISTS", Martijn van Zomeren
- **18:00-19:00** Unter den Linden 6 <u>Senatssaal</u>, *Wine and Poster Session II*

#### Friday, March 28

- 8:00-18:00 Dorotheenstraße 24 Foyer, Registration Open
- **9:00-10:00** Unter den Linden 6 <u>Audimax</u>, *Key Note III*, ON THE DEFINITION OF EMOTIONS: A PROPOSED SOLUTION, Rainer Reisenzein
- 10:00-10:30 Dorotheenstraße 24 Foyer, Coffee Break
- **10:30-12:30** Dorotheenstraße 24 <u>Room 1.101</u>, *Symposium 3.1*, PSYCHOPHYSIOLOGY AND PATHOLOGY OF EMOTION PERCEPTION AND PRODUCTION
- **10:30-12:30** Dorotheenstraße 24 <u>Room 1.102</u>, *Paper Session 3.1*, "MORALITY AND EMPATHY"
- **10:30-12:30** Dorotheenstraße 24 <u>Room 1.103</u>, *Symposium 3.2*, THE INTERACTION BETWEEN NORMS AND EMOTIONS ACROSS CULTURES
- **10:30-12:30** Dorotheenstraße 24 <u>Room 1.204</u>, *Symposium 3.3*, IN THE FACE OF THREAT
- **10:30-12:30** Dorotheenstraße 24 <u>Room 1.205</u>, *Paper Session 3.2*, "GROUP AND CONFLICT"
- **12:30-14:00** Unter den Linden 6 <u>Senatssaal</u>, *Lunch and Poster Session III*
- 14:00-16:00 Dorotheenstraße 24 <u>Room 1.101</u>, *Paper Session 4.1*, "PSYCHOPATHOLOGY"
- 14:00-16:00 Dorotheenstraße 24 <u>Room 1.102</u>, *Paper Session 4.2*, "EMOTION COMMUNICATION"
- **14:00-16:00** Dorotheenstraße 24 <u>Room 1.103</u>, *Symposium 4.1*, MULTILEVEL EXPLANATIONS OF THE SOCIALITY OF EMOTION
- 14:00-16:00 Dorotheenstraße 24 <u>Room 1.204</u>, *Symposium* 4.2, TOO LITTLE OR TOO MUCH FLEXIBILITY IN THOUGHTS AND FEELINGS: ASSOCIATIONS WITH PSYCHOLOGICAL HEALTH AND WELL-BEING IN DAILY LIFE
- **14:00-16:00** Dorotheenstraße 24 <u>Room 1.205</u>, *Paper Session 4.3*, "ANGER AND ENVY"
- 16:00-16:30 Dorotheenstraße 24 Foyer, Coffee Break
- **16:30-18:30** Dorotheenstraße 24 <u>Room 1.101</u>, *Symposium 5.1*, NARRATIVE QUALITIES OF EMOTIONS
- **16:30-18:30** Dorotheenstraße 24 <u>Room 1.102</u>, *Symposium 5.2*, SOCIAL DYNAMICS OF EMOTIONS IN GROUPS AND TEAMS
- **16:30-18:00** Dorotheenstraße 24 <u>Room 1.103</u>, *Symposium 5.3*, AFFECT ACROSS THE LIFE-SPAN: EMOTIONAL COMPETENCIES AND DYNAMICS FROM ADOLESCENCE TO OLD AGE
- **16:30-18:30** Dorotheenstraße 24 <u>Room 1.204</u>, *Symposium 5.4*, "I FEEL BETTER BUT I DON'T KNOW WHY": IMPLICIT EMOTION REGULATION AS A KEY TO EMOTIONAL ADAPTATION
- **16:30-18:30** Dorotheenstraße 24 <u>Room 1.205</u>, *Paper Session 5.1*, "HOW TO BE HAPPY"
- 20:00 Unter den Linden 6 Senatssaal, Gala Dinner