

Associatie van Sociaal Psychologische Onderzoekers



12 - 13 December 2019

## Welcome at the ASPO conference 2019 in Wageningen!

We are honored to host the annual ASPO conference in our town, and are excited that we can present an inspiring and high-quality program. There are over 90 presentations, both individual presentations and 10 symposia, covering a wide range of social psychological topics. On Thursday during the drinks there will be a poster session. Last but not least, Prof. Anna Dreber and Prof. Astrid Homan will give keynote speeches. You can find the schedule and abstracts of all presenters in this program overview.

The conference takes place at WICC, which is located in the city center. The locations of the sessions can be found in the schedule. On both days, the lunch is in the central lobby. On Thursday evening, we will serve a buffet dinner, also at WICC.

We wish you all an inspiring conference and an enjoyable stay in Wageningen!

The organizing committee

#### Information for the speakers and session chairs:

We have reserved about 17 minutes for each presentation, *including* time for questions, and including some time between speakers. We recommend to prepare a 12 minute presentation. Please put your presentation on the laptop that is in your session room before the session starts. Session chairs (always the last speaker) make sure the session begins in time and keep track of the time. In the rooms are signs that the chairs can use to inform the speaker about the remaining time.

## Information for poster presenters:

Poster boards are available for AO <u>portrait</u> posters. You will receive the number of your poster board via email. Remember, some of your audience may be judging for the Dancker Daamen poster award for the best poster at the ASPO conference. In addition to an honorable mention on the website, the Dancker Daamen prize is accompanied by a cash prize of 100 euros.

## How to get there

#### **Conference venue**

The ASPO Conference will take place at

Wageningen International Congress Centre (WICC), Lawickse Allee 9, Wageningen.

All activities will take place in this building.

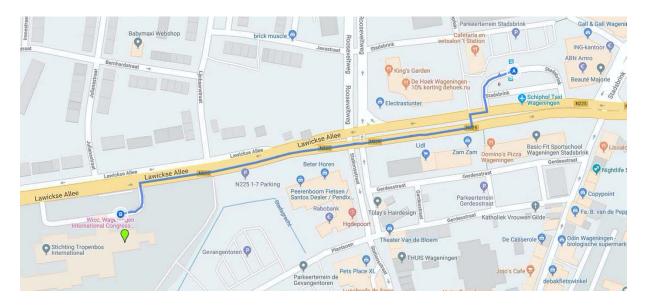
Coffee breaks will be held in the WICC Lounge. Lunches and Dinner will take place in the WICC Restaurant.

## **Getting to Wageningen**

Public transportation: take the train to station Ede-Wageningen. From Ede-Wageningen station you can take Syntus bus 84, 86 or 88 to the bus stop: Bus station Wageningen. This bus stop is within walking distance of the hotel/conference venue.

## Getting to the hotel/conference venue from the bus station: 5 minute walk (400m)

Head west on Stadsbrink towards N255 Lawickse Allee, cross the road at Olympiaplein and continue to follow N255 Lawickse Allee. The destination, Wageningen International Congress Centre (WICC), at Lawickse Allee 9, will be on the left.



#### Internet access

Details on how to access Wi-Fi within WICC will be provided at the conference desk.

## **SCHEDULE**

## **Thursday 12 December**

10.00-10.20	Registration + coffee/tea in the lobby
10.20-11.20	Opening and dissertation award - Haakzaal
11.20-12.30	6 x 4 presentations
12.30-13.30	Lunch
13.30-14.30	International keynote - Prof. Anna Dreber - Haakzaal
14.30-15.00	Break
15.00-16.10	5 x 4 presentations
16.15-18.15	Poster session + drinks – Kleine Veerzaal
19.00-23.00	Dinner

## Friday 13 December

9.30-10.00	Registration
10.00-11.10	5 x 4 presentations
11.10-11.30	Break
11.30-12.30	Members meeting - Haakzaal
12.30-13.30	Lunch
13.30-14.30	Poster award + keynote - Prof. Astrid Homan - Haakzaal
14.30-14.50	Break
14.50-16.00	5 x 4 presentations

#### **KEYNOTES**

Anna Dreber Almenberg

Johan Björkman professor of economics at the Stockholm School of Economics



Which results can we trust?
Combining replications and prediction markets to estimate the replicability of scientific results

Why are there so many false positive results in the published scientific literature? And what is the actual share of results that do not replicate in different literatures in the experimental social sciences? I will discuss several recent large replication projects on direct and conceptual replications, as well as our studies on wisdom of crowds mechanisms like prediction markets and forecasting surveys where researchers attempts to predict replication outcomes as well as new outcomes.

#### **Astrid Homan**

Professor of Work and Organizational Psychology, University of Amsterdam



Managing Diversity at Work: Preserving and Leading a Diverse Workforce

Diversity is a highly popular topic among academics and practitioners alike. Research on diversity is complex, and requires a diversity of approaches, borrowing theory and methods from social psychology, organizational psychology, organizational behavior, and sociology (just to name a few). By incorporating insights from these fields, we have tried to illuminate how organizations can stimulate and manage diversity, through interventions at the individual, team, and organizational level. In my talk, I focus on two main challenges: How to make members with different backgrounds feel included in organizations and how to foster effective collaboration among members with different backgrounds. I speak to both of these challenges by discussing pros and cons of diversity initiatives in stimulating feelings of inclusion and commitment of members of underrepresented groups as well as illuminate how, once you have a diverse workforce, this diversity can be managed effectively by functional leadership.

Thursday 11.20-12.30 parallel sessions (6 x 4 presentations)					
Kolkakkerzaal	Haakzaal	Dorskampzaal 1	Dorskampzaal 2	Hoevesteinzaal	Kleine Veerzaal
Cooperation, deception	Symposium:	Culture and Norms	Symposium:	Gender, children's	Symposium:
and gossip	<b>New Directions in Diversity</b>		Inclusion and exclusion:	bullying, motivation and	Gender in context:
	Research	Chair: Jannis Kreienkamp	Many facets of the need to	nostalgia	Understanding how social
Chair: Terence Dores Cruz		_	belong	_	and cultural contexts shape
	Organizers: Dilek Uslu &			Chair: Chuk Yan (Edwina)	men and women's
	Jojanneke van der Toorn		Organizers: Erdem Meral &	Wong	experiences and behavior
			Frank Doolaard		Organizer: Lianne Aarntzen
Do People Cheat Less When	Antecedents, Mechanisms	Pathogen avoidance and	Intersecting Dissimilarities:	How Explicit and Implicit	A cross-national
Others Can Gossip about	and Downstream	conformity: Does salient	The Additive Effect of	Status Approach and	investigation of intensive
Them?	Consequences of Negative	infectious disease turn	Perceived Dissimilarities on	Avoidance Goal Relate to	parenting norms
A '1 3T'	Workplace Gossip About	people into sheeple?	Social Inclusion	Bullying Participant Roles in	T. M.
Annika Nieper	Female Leaders Who Benefit	F1 ' I	0 01:	Children	Loes Meeussen
	from Diversity Initiatives	Florian van Leeuwen	Onur Şahin	Tessa Lansu	
	Seval Gündemir			Tessa Lansu	
Accepting offers as they pass	Why Value Diversity? How	On the Relationship Between	Practice what you preach:	National nostalgia and	Fathers' and mothers' work-
by: The relation between	Communicated Diversity	Moral Reputational Concern	The moderating role of	support for populist radical-	family guilt in cross-national
mindfulness and cooperation	Motives affect the	and Cultural Tightness-	teacher attitudes on the	right parties	perspective
in the Ultimatum Game.	Employment Image of	looseness	relationship between	light parties	perspective
	Public and Private Sector		prejudice reduction and	Anouk Smeekes	Lianne Aarntzen
	Organizations	Yvette van Osch	student engagement		
Kim Lien van der Schans					
	Wiebren Jansen	cancelled	Ceren Abacioglu		
When people deceive: The	Brief Social Psychological	Frustration-Affirmation?	Go on without me: When	Counter-stereotypicality of	Why National Context
influence of location on	Interventions to Reduce the	Thwarted Goals Motivate	low-performing group	gender comparisons	Matters When Women
people's deceptive decision	Leadership Gender Gap	Conformity to Social Norms	members prefer exclusion	eradicates focalism in the	Surpass Their Partner in
making		for Violence and Non-	over inclusion	claims' interpretations	Status
16 11 6 1	Dilek Uslu	Violence			36.11
Marielle Stel		M	Frank Doolaard	Alexandra Lux	Melissa Vink
Selfish and Prosocial	Privacy and Inclusion: How	Maximilian Agostini The Motivational Basis of	Social sharing of rejection:	Intersectional Needs for	A relational perspective on
Motives for Gossip	Policy Decisions Aimed at	Intergroup Contact - Two	Targets perceive talking	Gender Diversity	women's empowerment. The
Monves for Gossip	Protecting Employees can	Extensive Longitudinal	about rejection as a costly	Interventions	influence of marital partners
Terence Dores Cruz	Inadvertently Harm Them	Studies Studies	undertaking	inci ventions	on empowerment among
Totalico Boros Ciuz	indiversity Huilli Hielli	Stadion	under untiling	Chuk Yan (Edwina) Wong	women in Vietnam and
	Jojanneke van der Toorn	Jannis Kreienkamp	Erdem Meral	Limit (Editina) Wong	Bolivia
	,	r			
					Marloes Huis

Thursday 15.00-16.10 parallel sessions (5 x 4 presentations)				
Kolkakkerzaal	Haakzaal	Dorskampzaal 1	Dorskampzaal 2	Hoevesteinzaal
(Novel) Methods	Symposium:	Ambiguity and uncertainty	Symposium:	Symposium:
	A social neuroscientific		Morality and Justice	Person Perception
Chair: Cameron Brick	perspective on interactions between groups and individuals Organizers: Ilona Domen & Inga Rösler	Chair: Anne Marthe van der Bles	Organizer: Ana Leal	Organizers: Bastian Jaeger & Gijs Bijlstra
The Influence of Data Trimming and Transformation on Results and Conclusions in Reaction-Time-Based Tasks: The Case of Breaking Continuous Flash Suppression  Maximilian Primbs	Men set the standard in masculine domains: women's vicarious neural responses when viewing men and women perform a spatial ability task.  Ilona Domen	The social function of ambiguity: A new methodology to compare online and offline discussions  Carla Anne Roos	Orienting inwards in times of collective injustice: Alternative forms of 'collective action' in response to man-made disaster  Katherine Stroebe	Top-down processes affect face detection  Gijsbert Bijlstra
Moral relevance of big data	The reluctance to punish free-	Effectiveness of social influence	The Yin and Yang of social	Contextually induced emotion:
technologies: moral to some, but not others	riding: Evidence from a fMRI study	under choice uncertainty: a mouse-tracker paradigm applied to indifference and ambivalence	change: The interplay between participation in collective action and moral conviction in a 2-year	"Seeing" emotion where there is none
Rabia Kodapanakkal	Welmer Molenmaker	Tina Venema	longitudinal study  Ana Leal	Marte Otten
The mobile AAT and intergroup biases Hilmar Zech	Moral judgments don't get the job done: How social context influences emotional and attentional responses to being judged  Inga Rösler	Confidence in Values and Valuebased Choice Julian Quandt	Ana Lear  A moral educational divide? Applying network analysis to compare the structure of moral foundations in liberals and conservatives who are higher educated and less educated	The social cost of correcting others  Willem Sleegers
	6		Felicity Turner-Zwinkels	
Effects of being watched on a sensitive laboratory measure of pro-environmental behavior: a Registered Report	The Motivational Consequences of Changing Gender Relations: A Psychophysiological Field-study at Lowlands	The effects of communicating uncertainty on public trust in scientific numbers	People respond with different moral emotions to violations in different relational models: A cross-cultural comparison	Lay beliefs in physiognomy predict overreliance on first impressions
Cameron Brick	Daan Scheepers	Anne Marthe van der Bles	Yasin Koc	Bastian Jaeger

Friday 10.00-11.10 parallel sessions (5 x 4 presentations)				
Kolkakkerzaal	Haakzaal	Dorskampzaal 1	Dorskampzaal 2	Hoevesteinzaal
Sustainability	Social relations	Food	Symposium:	Symposium:
Chair: Erica van Herpen	Chair: Reine van der Wal	Chair: Muriel Verain	Process tracing methods as a tool to investigate unethical behavior	Complexities in belief systems, threat, and politics: Moving beyond the easy answers
			Organizer: Christoph Kogler	Organizers: Mark Brandt, Bastiaan Rutjens, Anne Marthe van der Bles & Frank Gootjes
When guilt brings on positive	Friends as tools: the relationship	Multidimensionality of food	Your lies leave me cold: Thermal	Understanding Brexit: the impact
change: Applying a network	between dispositional greed and	neophobia: Variation across	imaging reveals decreased finger	of collective societal discontent
approach to attitudes in changing consumer behaviour towards	social contacts	meats and plants	temperatures when observing lies	on support for radical societal change
plastic	Karlijn Hoyer	Çağla Çınar	Rima-Maria Rahal	Change
plastic	Karijii Hoyel	Çugia Çinai	Kima Wara Kanar	Anne Marthe van der Bles
Maria Zwicker				
Return of the Philosopher:	People from lower social classes	Hungry for emotions: The effect	Fooling whom out of his money?	Society is going down":
Investigating pro-environmental	elicit greater prosociality;	of food deprivation on pathogen-	Investigating arousal dynamics in	investigation of the role of
behaviour with three competing	compassion and deservingness	avoidance and food neophobia	the context of betraying a stranger	societal discontent in responses to
conceptions of autonomy	matter		or an institution	the refugee situation
	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	Paola Perone		F 1.6
Christopher Robin van Rugge	Niels Van Doesum		Alina Fahrenwaldt	Frank Gootjes
Promoting healthy and	Social relations as predictors of	Social consumption norms	Loss framing increases self-	The association between threat
sustainable consumption behaviour in restaurants:	health and wellbeing	underlying the effect of portion size on later food intake	serving mistakes (but does not	and politics depends on the type of threat, the political domain,
Portioning meat and vegetables	Justin Richardson	size on later food intake	alter attention)	and the country
1 ortioning meat and vegetables	Justin Kichardson	Sanne Raghoebar	Margarita Leib	and the country
Machiel Reinders		Saime Ragnovour	Transpiritu Delo	Mark Brandt
Defaults and Decisions: The	The Interpersonal Power of	Real-life behavioural	Delayed audit feedback boosts tax	Spiritual skepticism?
effects of strategies to increase	Other-Oriented Self-Regulation	interventions to stimulate more	compliance but increases	Heterogeneous science skepticism
the uptake of doggy bags		plant-based and less animal-based	acquisition of information on	in the Netherlands
	Reine van der Wal	diets: A systematic review	consequences of evasion	
Erica van Herpen		1	S	Bastiaan Rutjens
		Muriel Verain	Christoph Kogler	

	Friday 14.50-	16.00 parallel sessions (5 x 4	presentations)	
Kolkakkerzaal	Haakzaal	Dorskampzaal 1	Dorskampzaal 2	Hoevesteinzaal
Close relationships	Immigration, prejudice and	Emotions	Symposium:	Symposium:
	racism		Diversity in (social) contextual	The implications of (not)
Chair: Ruddy Faure		Chair: Cristhian Martínez	influence of smells: From	having free choice
	Chair: Hanna Szekeres		evolution to learning to	
			understand human olfaction	Organizers: Daniela Becker & Erik Bijleveld
			Organizers: Jasper de Groot & Ilja Croijmans	
Trait Self-control and	Disgust sensitivity and opposition	Moral Emotions and Aggressive	A non-linear dose-response to the	The effect of decisional conflict
Relationship Satisfaction among	to immigration: Does contact	Tactics in Third Party	smell of fear: Behavioral,	on memory
Heterosexual Couples: How	avoidance or resistance to foreign	Punishment: The Effect of	physiological, and neural	
Strong Is the Association Really?	norms explain the relationship?	Welfare Tradeoff Ratio	evidence	Daniela Becker
Peiying Zuo	Annika Karinen	Lei Fan	Jasper de Groot	
Financial Decision-Making under	When cultures clash: How	Regret and Disappointment are	Illuminating disgust sensitivity	Sense of agency as a predictor of
Scarcity: The Household Game	perceived cultural distance in	Differentially Associated with	via olfactory threshold testing	risk-taking
and Temporal Discounting	values triggers attitudes about	Norm Compliant and Norm		
	migrants in the Netherlands	Deviant Failures	Josh Tybur	Tom Damen
Leon Hilbert				
	Katja Albada	M. Necip Tunç		
A Nice Surprise: Sacrifice	Moralization about Zwarte Piet in	Communicating anger or disgust	Is there a role for olfaction in	What keeps people from
expectations and partner	The Netherlands	in moral political rhetoric: Does it	embodiment?	following advice? A new
appreciation in romantic		help or hurt galvanizing political		approach to investigating
relationships	Chantal D'Amore	support?	Laura Speed	reactance
Giulia Zoppolat		Martijn Blikmans		Iris Verpaalen
Executive Control: When and for	Witnessing, and Not Confronting	Is Hate the Same as Extreme	Odor language and memory in	Distracted by rewards: A meta-
Whom Implicit Partner	Racism Amplifies Non-	Dislike? Differences across	wine experts	analysis
Evaluations Predict Forgiveness	Confronters' Prejudicial Attitudes	Abstract, Interpersonal and		
in Close Relationships		Intergroup Targets	Ilja Croijmans	Dorottya Rusz
	Hanna Szekeres			
Ruddy Faure		Cristhian Martínez		

## Cooperation, deception and gossip

## Do People Cheat Less When Others Can Gossip about Them?

Annika Nieper<sup>1\*</sup>, Bianca Beersma<sup>1</sup>, Maria T. M. Dijkstra<sup>1</sup>, and Gerben A. van Kleef<sup>2</sup>

Cheating is widespread and comes with a huge cost to society. Understanding the mechanisms which deter cheating in everyday life is thus of utmost importance. Here, we propose that gossip, the exchange of information about absent others, can function as a low-cost mechanism which deters dishonest behavior in everyday life. We test this proposition by examining whether people cheat less when others can gossip about their behavior. Participants (N = 660) are asked to roll a die 30 times and they are incentivized to misreport these die roll outcomes because they receive a higher monetary bonus for reporting higher numbers. We compare the numbers they report in three conditions: (1) an individual condition, in which the dicers merely report the die roll outcomes to the experimenter, (2) a note writing condition, in which the dicers report the die roll outcomes to another participant, who writes a note about their behavior in private, and (3) a gossip condition, in which the dicers report the die roll outcomes to another participant, who writes a note about their behavior and this note is sent to the dicer's future interaction partner in a subsequent task. The data will indicate whether gossip deters cheating and thereby increase the understanding of the social functions of gossip in everyday life.

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<sup>&</sup>lt;sup>2</sup> Department of Social Psychology, Universiteit van Amsterdam, The Netherlands

#### Cooperation, deception and gossip

Accepting offers as they pass by: The relation between mindfulness and cooperation in the Ultimatum Game.

Authors: Kim Lien van der Schans, MSc., dr. Johan Karremans, & prof. dr. Rob Holland Affiliation: Behavioural Science Insitute Radboud University Nijmegen

While research indicates that mindfulness can benefit individual well-being, less is known about its potential impact in the interpersonal domain. In the current project, we assessed whether dispositional mindfulness relates to increased cooperation in an economic game. Extant research suggests that participants usually react with negative emotions to perceived unfairness which in turn hampers cooperation. Conversely, mindfulness has been associated to a reduction in emotional reactivity and increases in emotion regulation once intense emotions do occur. Therefore, we reasoned that mindfulness would predict cooperation in an ultimatum game, perhaps even in case of unfair offers. In two online studies - of which one preregistered – we assessed whether dispositional mindfulness positively predicts cooperation as assessed with the acceptance rate of offers in the Ultimatum Game. We found mixed results. Whereas Study 1 indeed showed a significant positive relation between mindfulness and acceptance of offers, Study 2 did not show this relation. Exploration of participants' written reactions to the studies suggest that acceptance of more (unfair) offers are perceived as not serving the common good; while acceptance of unfair offers would benefit the individual in the short-term, rejection of such unfair offers would enforce social norms of sharing in the long-term. Future research assessing the motivation to cooperate or punish could further elucidate the nuanced relation between mindfulness and interpersonal behavior.

## Cooperation, deception and gossip

When people deceive: The influence of location on people's deceptive decision making

Authors: Marielle Stel, Claudia Brychlec, Bram Doms, & Fabienne Krywuczky

Affiliation: University of Twente, The Netherlands

Deception can be costly when they harm individuals and society, for example when committing fraud, stealing, and cheating. Therefore it is important to be able to detect and reduce this deception. So far, however, researchers have been unsuccessful at establishing when people deceive. While extant research focuses on the cues individuals display when deceiving and on the individual factors that influence deceptive behaviour, we propose that vital additional insights into why people deceive and how to reduce this so far unpredictable behaviour can be obtained by focusing on contextual determinants of deception. We investigated to what extent the moment of decision—encompassed by where people are making the deception judgment— influences people's deceptive decision making. We predict that locations associated with self-centeredness (e.g., prisons) will influence how people view themselves and what they regard as appropriate behaviour, which should trigger more deception than locations associated with prosocialness (e.g., church). In a study with 161 participants, location was manipulated by having participants vividly experience they were at the location of a prison (associated with self-centredness) or a church (associated with prosocialness). Afterwards, deceptive decision making was measured by asking participants to make decisions in eight social dilemma's in which they could choose between being deceptive or honest. The results showed that participants in the selfcentered location indeed deceived more than participants in the prosocial location. This effect was obtained for deceit with the motivation to promote the self, not for deceit to promote other people.

#### Cooperation, deception and gossip

## **Selfish and Prosocial Motives for Gossip**

Terence D. Dores Cruz<sup>a</sup>, Romy van der Lee<sup>a</sup> & Bianca Beersma<sup>a</sup>

<sup>a</sup> Vrije Universiteit Amsterdam

#### Abstract:

On the one hand, experimental studies indicate gossip, communicating about an absent other, stems from other-regarding (i.e., prosocial) motives and that gossip promotes cooperation. On the other hand, observational and cross-sectional studies indicate gossip stems from self-serving (i.e., proself) motives and that gossip is detrimental for employees. It is essential to combine these lines of research to further our understanding of gossip. To examine both proself and prosocial motives to gossip, we conducted an experimental scenario study (N = 360) in which participants imagined observing the first mover in a sequential weak prisoners dilemma game making a decision and having the opportunity to communicate about this to the second mover. We manipulated outcome dependency by informing participants either that their outcomes would be equal to the first mover's outcomes in the dilemma game, or, in contrast, equal to the second mover's outcomes (between-subjects factor). We also manipulated first mover decisions (cooperative versus defective; within-subjects factor). We assessed whether participants sent gossip, whether gossip content was truthful or false, and their motives to gossip. Results showed that participants more often gossiped falsely when their outcomes were linked to the first rather than to the second mover, and when the first mover defected than when they cooperated. However, we found no interaction effect between outcome dependency and first mover decision, and the results for gossip motives were inconclusive. Our results provide a preliminary indication that different outcomes for gossipers can lead to proself gossip, yet understanding the underlying motives requires additional research.

**Symposium: New Directions in Diversity Research** 

#### Symposium:

## **New Directions in Diversity Research**

Organized by: Dilek Uslu, Koç University

Jojanneke van der Toorn, Utrecht University

Email address for correspondence: <u>j.m.vandertoorn@uu.nl</u>

#### **General abstract**

In this symposium we present new directions in diversity research, uncovering covert forms of diversity resistance, testing new social psychological interventions, debunking a common assumption regarding diversity communication, and demonstrating unintended policy consequences. First, by examining the antecedents, mechanisms and consequences of negative workplace gossip about the beneficiaries of diversity initiatives, Seval Gündemir sheds light on the covert ways in which opposition to diversity initiatives may occur in today's diversity-oriented workplaces. Second, the findings by Wiebren Jansen debunk the common assumption that it is in the organization's interest to make a business case for diversity. Instead a moral case may be a better fit, depending on the organization's sector. Third, Dilek Uslu shows the promise of brief social psychological interventions for reducing the stereotype threat that women without leadership experience may experience in evaluative contexts. Finally, Jojanneke van der Toorn demonstrates the tension between privacy and inclusion at work by showing the unintended negative effect of policy decisions favoring employee privacy over equality on sexual minorities' feelings of inclusion. Together, these studies underline the complex business of diversity management and the need for evidence-based diversity initiatives.

**Symposium: New Directions in Diversity Research** 

Antecedents, Mechanisms and Downstream Consequences of Negative Workplace Gossip

About Female Leaders Who Benefit from Diversity Initiatives

Seval Gündemir<sup>1</sup>, Michael L. Slepian<sup>2</sup>, & Bianca Beersma<sup>3</sup>

<sup>1</sup> University of Amsterdam

<sup>2</sup> Columbia University

<sup>3</sup> VU University Amsterdam

Modern organizations are increasingly characterized by pro-diversity norms and employ numerous initiatives to boost diversity and inclusion of traditionally underrepresented groups such as women. In these environments, open and overt resistance to these initiatives is socially unaccepted and can be personally costly. We posit that one way in which employees with relatively stronger anti-egalitarian beliefs (which predispose them to oppose diversity initiatives), will resist such initiatives is through engagement in more covert acts of resistance, such as negative gossip, about these initiatives' beneficiaries. Across four experiments ( $n_{\text{total}} = 1232$ ), we illuminate the antecedents, mechanisms and consequences of negative gossip about female leaders benefiting from organizational diversity initiatives. Study 1 shows that employees' anti-egalitarian beliefs predict negative gossip about their female leader benefiting from these programs, but not when their female leader does not benefit from such a program. Study 2 replicates this finding and suggests that the more diversity-driven (vs. justice driven) an initiative is, the more those with anti-egalitarian beliefs feel threatened by its beneficiary, which in turn, leads to negative gossip. The final two experiments examine the downstream consequences of this type of relatively covert resistance to female leaders. Gossiping seems to allow those who engage in it to let off steam, making those with anti-egalitarian beliefs less punitive towards the female leader (Study 3). Yet, hearing gossip about a diversity initiative beneficiary makes those with antiegalitarian beliefs more punitive toward her and less willing to follow her leadership (Study 4). We discuss implications for theory and diversity management.

**Symposium: New Directions in Diversity Research** 

Why Value Diversity? How Communicated Diversity Motives affect the Employment Image of Public and Private Sector Organizations

Wiebren Jansen<sup>1</sup>, Charlotte Kröger<sup>1</sup>, & Jojanneke Van der Toorn<sup>12</sup>

<sup>1</sup> Utrecht University

<sup>2</sup> Leiden University

Many organizations publicly declare their appreciation of workforce diversity. Some organizations motivate their commitment to diversity for business related reasons (e.g., "diversity enhances creativity"), while others state moral reasons (e.g., "diversity reduces social inequalities") to invest in diversity initiatives. In our first study, we investigated whether public and private sector organizations differ in their communicated diversity motives. We collected, coded, and analysed the public diversity statements from the websites of all 135 organizations that have signed the Dutch Diversity Charter. Our results indicated that public and private sector were equally likely to communicate business and moral motives. In our second study, a scenario study (n = 343) in which we manipulated diversity motive and organizational sector, we examined how communicating these motives affects the organizations' employment image of public and private sector organizations in the eyes of prospective employees. Our results indicated that for public sector organizations communicating moral motives instead of business motives or valuing diversity led to a more favourable employment image. For private sector organizations, there were no differences between the motives in employment image. Together, these results demonstrate that particularly public sector organizations should refrain from using business arguments in their diversity statements.

**Symposium: New Directions in Diversity Research** 

## Brief Social Psychological Interventions to Reduce the Leadership Gender Gap

Dilek Uslu<sup>1</sup>, & Yasemin Kisbu-Sakarya<sup>1</sup>

<sup>1</sup> Koç University

A robust body of research demonstrates that gender stereotypes have adverse consequences for women, for example by contributing to the continuing leadership gender gap (e.g., decreased leadership performance and lowered leadership aspirations). The primary goal of the current study was to examine ways in which this prevailing leadership gender gap can be reduced. Specifically, we tested the effectiveness of brief social psychological interventions for reducing the stereotype threat that women experience. In a sample of female students (n = 181), we tested two different forms of brief social psychological interventions; values affirmation and role modeling. Participants, after receiving the interventions, were put in a virtual reality (VR) office environment and asked to give a three-minute presentation to three ostensible male co-workers. The presentation was evaluated in terms of leadership performance based on 4 different criteria: oral communication, presentation organization, guidance/delegation, and overall leadership ability. Additionally, the participants completed questionnaires assessing their subjective performance and leadership aspirations. Results demonstrated that, among women without leadership experience, the values affirmation intervention was effective with regards to increasing women's leadership performance and the role modeling intervention was effective in terms of increasing their leadership aspirations (compared to the control group). Neither intervention was effective among women with leadership experience.

**Symposium: New Directions in Diversity Research** 

Privacy and Inclusion: How Policy Decisions Aimed at Protecting Employees can

Inadvertently Harm Them

Jojanneke van der Toorn<sup>12</sup>

<sup>1</sup> Utrecht University

<sup>2</sup> Leiden University

To facilitate inclusion at work, organizations may register sensitive employee data such as sexual orientation and gender identity to help identify and combat a "pink ceiling" or other group-based inequalities. However, managing such privacy-sensitive data also creates challenges. Both asking about employees' stigmatized group memberships and refraining from doing so could have unintended consequences, and unintentionally cause exclusion instead of inclusion. Given this possible tension between privacy and inclusion, research is needed into the limits, possibilities, and consequences of registering LGBTI+ data in the workplace. The current study, conducted among cisgender heterosexual (n = 164) and LGBT (n = 63) employees, examined how policy decisions regarding voluntary self-identification at work impact sexual majority and minority employees. Participants either read a hypothetical scenario that their organization refrained from implementing the policy in order to protect employee privacy or that their organization implemented the policy in order to realize employee equality. Results revealed that, regardless of sexual orientation and gender identity, participants in the privacy (vs. equality) condition perceived the organizational climate as providing less room for sexual orientation and gender identity. Importantly, for LGBT participants, this perception was related to decreased work-satisfaction and inclusion, and increased work-related stress. Hence, while both policy decisions were motivated by the organization's concern for employees, the choice to not implement the policy over privacy concerns inadvertently gave the impression that the company was not interested in its LGBT employee base.

#### **Culture and Norms**

# Pathogen avoidance and conformity: Does salient infectious disease turn people into sheeple?

Florian van Leeuwen & Michael Bang Petersen
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By conforming to ingroup norms, individuals coordinate with other group members, preserve cohesion, and avoid costs of exclusion. Recent work suggests that conformity is influenced by pathogen avoidance motivations. Some experimental studies have shown that increased concerns about infectious disease increases conformity and both individual and cross-cultural differences in conformity are correlated with pathogen-related variables. For example, countries with more infectious disease have cultures with tighter norms and individuals who are more concerned about infectious disease emphasize conformity. However, coordination with group members has myriad benefits, most of which exist independent of pathogen hazards. Accordingly, a strong causal effect of concerns about disease on conformity appears suboptimal from an adaptationist perspective. These theoretical concerns are supported by results from three experiments that showed no support for the hypothesis that increasing pathogen avoidance motivations increases conformity (total N=755, all ps>.15). In fact, two of the three experiments showed a nonsignificant effect in the direction opposite of the hypothesis. This raises two puzzles: If increased pathogen concerns do not increase conformity, then (1) why are individuals who are more concerned about infectious disease more traditional, and (2) why do countries with more infectious disease have cultures with tighter norms?

#### **Culture and Norms**

## On the Relationship Between Moral Reputational Concern and Cultural Tightnesslooseness

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Abstract for individual presentation:

Across cultures, moral reputation is valued more than non-moral values, except for physical security (Vonasch, Reynolds, Winegard, & Baumeister, 2018). This attests to the importance of moral reputation across cultures. However, there may still be cultural differences in the strength of the importance of moral reputation. In this paper, it is argued that people are more concerned about their moral reputation in tighter cultures. Cultural tightnesslooseness is defined as the strength of norms and punishments within a culture (Gelfand, Nishii, & Raver, 2006). If the norms and punishments are relatively strong, then that culture is considered tighter. A total of eight correlational analyses using data from different waves of the World Values Survey tested the hypothesis that people in tighter cultures are more concerned about their moral reputation. Six out of eight analyses suggested a positive relationship between tightness and moral reputational concern. One analysis suggested a negative relationship, and one analysis suggested no relationship between tightness and moral reputational concern. Because there were conflicting results, a meta-analysis of the correlation coefficients was carried out. In line with the expectations, results suggested that people in tighter cultures were more concerned about their moral reputation. Implications will be discussed.

#### **Culture and Norms**

## Frustration-Affirmation? Thwarted Goals Motivate Conformity to Social Norms for Violence and Non-Violence

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The present research addresses the paradox that thwarted goals can increase both individuals' endorsement of violence and endorsement of pro-sociality. Across five studies, we show that thwarted goals motivate conformity to norms that may advocate either.

Studies 1-3 establish that thwarted goals increase attraction to violence among U.S. adults of a lower educational background and/or men who endorse a masculine honor culture. Study 4 manipulates the perceived ingroup norm demonstrating that in college educated Americans, thwarted goals increase sensitivity to whichever norm is salient: pro-war or antiwar. Finally, to generalize our model beyond a focus on violent means, Study 5 demonstrates that goal-thwarted Europeans report increased willingness to volunteer for refugee support activities, but only if they perceived strong ingroup norms to volunteer. Altogether, the present research supports a frustration-affirmation mechanism, whereby thwarted goals increase sensitivity to group norms for behavior, whatever these may be.

#### **Culture and Norms**

The Motivational Basis of Intergroup Contact - Two Extensive Longitudinal Studies

How a newcomer to a culture perceives the host group is often of pivotal importance

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to a successful cultural adaptation process of the migrant. Even though cultural adaptation has broadly been connected to one's daily intercultural contacts, we know very little about how these daily interactions influence attitudes, behaviors, and well-being. Based on social motivational theories and assumptions of intergroup contact theory, we propose that the fulfillment of key situational needs offers a bottom-up psychological explanation of key acculturation changes (including attitudes towards the host culture, behavioral strategies, and well-being).

In two extensive longitudinal studies (total N = 167, with 6,578 measurements), we follow first generation migrants for 33 days and examine their daily intercultural contacts with Dutch majority members. We find that need fulfillment during interactions in general and the self-reported situational key-need, in particular, are strong predictors of changes in outgroup attitudes. We also show that the effects of situation need fulfillment on outgroup attitudes are mediated by perceptions of interaction quality. These results suggest that situational psychological needs during intergroup contacts might offer a bottom-up and flexible explanation for when and how intergroup contact can have positive effects on intergroup relations.

Symposium: Inclusion and exclusion: Many facets of the need to belong

Symposium:

Inclusion and exclusion: Many facets of the need to belong

Organizers: Erdem O. Meral, Frank Doolaard

**General abstract** 

Inclusion and exclusion: Many facets of the need to belong

Individuals have a fundamental need to belong and the experience of social exclusion, which is mostly aversive, threatens this need. In the proposed symposium we discuss how individuals perceive and deal with threats to their belonging, and how one's environment at school and work can have an impact on the sense of inclusion. Inclusion at the workplace is an important facet of the need to belong that has both individual and organizational consequences. Investigating this within a large public service organization, our first speaker Onur Şahin talks about how the number and intersection of dissimilarity characteristics relate to employees' feelings of inclusion. Ceren Abacioglu discussess another applied aspect of belonging: looking at primary school classrooms across the Netherlands, she investigates how teachers' prejudice reduction practices can provide a more inclusive environment in which students are more engaged in learning. Previous work highlights how social inclusion is a positive and social exclusion is a negative experience. However, in his talk, Frank Doolaard discusses how performance in the group moderates these experiences - and demonstrates that exclusion can be preferable and beneficial for low-performers. People respond to belonging threats in various ways. Erdem Meral discusses how targets of exclusion perceive talking about their experiences with others and shows that targets see this as costly. In this symposium we would like to show how the need to belong impacts many facets of one's daily life and how individuals construe and deal with threats to their belonging.

Symposium: Inclusion and exclusion: Many facets of the need to belong

Intersecting Dissimilarities: The Additive Effect of Perceived Dissimilarities on Social Inclusion

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Previous research showed that employees' perception of being dissimilar to others at work negatively relates to their felt inclusion. Using survey data collected from 6486 employees of a public service organization, the current research corroborates and extends these findings. An ANOVA showed that both deep-level (invisible) and surface-level (visible) dissimilarity were negatively related to felt inclusion, and that this relationship was stronger for deep-level dissimilarity. We further explored whether different bases of dissimilarity relate differently to inclusion. The dissimilarity characteristic that was reported most often was personality, followed by (in descending order) ethnicity, age, work experience, religion, sexual orientation, disability, education level, political orientation, and gender. Participants' felt inclusion mostly did not differ between the dissimilarity characteristics. Furthermore, we investigated how the number and intersection of dissimilarity characteristics relate to social inclusion. Dissimilarity on two characteristics was more strongly related to inclusion than dissimilarity on only one characteristic. To illustrate this additive effect, participants who perceived dissimilarity in terms of both personality and ethnicity felt less included than participants who perceived dissimilarity in terms of only personality or only ethnicity. Likewise, dissimilarity on three characteristics was more strongly related to inclusion than dissimilarity on two characteristics. No decrease was found after more than three characteristics. This research improves our understanding of how dissimilarity relates to inclusion by distinguishing between deep-level and surface-level dissimilarity and by using an intersectional approach, demonstrating the importance of the number and intersection of dissimilarity characteristics for social inclusion.

Symposium: Inclusion and exclusion: Many facets of the need to belong

Practice what you preach: The moderating role of teacher attitudes on the relationship between prejudice reduction and student engagement

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A sense of belonging, relatedness, and acceptance relies heavily on students' perceptions of the learning environment, especially their relationship with peers. Previous scholarship has highlighted the importance of these feelings on maintaining students' motivation and school engagement. Yet, today, schools continue to be sites of intercultural tension, and the educational achievement of ethnically minoritized students still lags behind that of their ethnic majority peers. The current study examined the relationship between teachers' prejudice reduction practices, focusing on dialogue about issues around diversity and confronting intergroup bias, and their students' engagement as a factor that might mitigate the disadvantaged educational position of minoritized students. As the success of such attempts can be influenced by the teachers' worldviews that are either consciously expressed or more automatically communicated, we additionally investigated the potential moderation of this relationship by teachers' explicit multicultural attitudes and implicit attitudes towards ethnic minorities. Our multilevel models using 35 primary school teachers and 711 students showed that only for teachers who reported above-average multicultural attitudes and awareness, prejudice reduction was positively associated with student engagement (B = 0.11, p < .05). Our results suggest that these teachers might not only promote multiculturalism as an abstract ideal, but they actually "walk the talk". They not only know what they want to promote in their students but also know how to promote, as they are more aware of and able to identify potential "hot spots" in their students' experiences and realities within and outside of school.

Symposium: Inclusion and exclusion: Many facets of the need to belong

Go on without me: When low-performing group members prefer exclusion over inclusion

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A large body of social psychological research has demonstrated that when people are excluded from groups, they feel negative as a result: victims of exclusion experience decreased belonging, control, self-esteem, and meaningful existence, and suffer from hurt feelings. Inclusion, by contrast, is almost invariably discussed as a positive outcome in the literature. In the current research we propose that in fact, people's experiences of inclusion and exclusion are less fixed, and depend largely on how they perform in the group. Data of 3 studies showed that low-performing group members felt distressed and guilty over underperforming while they were part of the group. Importantly, consecutive inclusion in the group was experienced as less positive by them than by high-performing group members. They also experienced exclusion as relatively relieving and preferred. Ultimately, low-performing group members even were relatively likely to exclude themselves from the group when they had the chance. The data pointed out that this self-exclusion actually improved their mood and need fulfilment relative to when they were part of the group. This research thus shows that depending on their experience while part of the group, people can appraise and experience inclusion and exclusion quite differently from what is commonly reported.

Symposium: Inclusion and exclusion: Many facets of the need to belong

Social sharing of rejection: Targets perceive talking about rejection as a costly undertaking

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Social rejection is a negative experience. While previous work highlights the negativity of this experience for all the actors involved, how targets deal with this negativity received less attention. In the current study, we investigate an important social tool that could be utilized in response to rejection: social sharing, i.e., the act of talking about social rejection. Across 5 pre-registered studies (N = 1117) we investigated how people perceive talking about rejection to others by considering the perspectives of those who are rejected (target) and those who may listen to them (audience). Participants reacted to a scenario where the target working in a team gets reassigned to a new team either because of social rejection or a random draw. The results revealed that people do not necessarily perceive talking about rejection more beneficial than the control (Study1). Investigation of the potential costs revealed that the audience devalues someone who shares their rejection experience and that the targets anticipate being devalued and rejected upon sharing their experiences (Study 2a & 2b). Moreover, we show that while targets might have the urge to talk about their experiences, they also feel reluctant to do so (Study 3). Lastly, the results indicate that when talking to a close other, the targets perceive less costs and report lower reluctance levels (Study 4). Taken together, these results contribute to our understanding of social rejection by showing that social sharing of reje

#### Gender, children's bullying, motivation and nostalgia

# How Explicit and Implicit Status Approach and Avoidance Goals Relate to Bullying Participant Roles in Children

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Striving for high status among peers is positively associated with aggression (Cillessen et al., 2014), however, avoiding low status may be another force driving children's behavior during aggressive situations. The current study therefore examines how children's explicit and implicit popularity approach and avoidance motivations are related to their role in their classroom's bullying dynamic. It is expected that bullying - and to a lesser extent also assisting and reinforcing bullying - are related to stronger popularity approach goals, as bulling may be viewed by adolescents as a way to gain or maintain popularity (Caravita & Cillessen, 2012). In addition, it is expected that children who facilitate rather than initiate bullying (assistants and reinforcers), do so because they want to avoid unpopularity.

Participants were 163 5<sup>th</sup> and 6<sup>th</sup> graders, who completed sociometric nominations regarding bullying involvement (bully, assistant, reinforcer, victim, defender, outsider; Salmivalli & Voeten, 2004) in their classroom. They also answered questions addressing explicit popularity approach and unpopularity avoid goals, and completed a popularity and an unpopularity Approach-Avoidance Task.

Although bullying initiation was unrelated to status goals, facilitating bullying was positively related to the explicit goals of obtaining high popularity as well as the explicit and implicit goal to avoid low popularity. And whereas victimization was unrelated to status goals, defending and being an outsider were associated with lower explicit popularity priorities and low explicit unpopularity avoidance motivation. Addressing the motivation to avoid low status in youth reinforcing the bullying process could be a promising new direction for intervention efforts.

#### Gender, children's bullying, motivation and nostalgia

## National nostalgia and support for populist radical-right parties

#### **Anouk Smeekes**

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Research indicates that national nostalgia thrives across the world and is harnessed by populist radical-right parties (PRRPs) to mobilize people for their exclusionary standpoints. Scholars have argued that this "longing for the good old days of our country" is an important part of the ideology of PRRPs and forms an explanation for why these parties are successful. While there are many studies trying to explain the support for PRRPs, there are, to date, no studies that have looked at feelings of national nostalgia as a characteristic of PRRP voters when explaining the electoral potential of these parties. In this research, I investigated whether and why national nostalgia is related to support for PRRPs. Based on an integration of theory from political science on PRRP ideology with previous social psychological work on national nostalgia and group dynamics, I predicted that national nostalgia relates to a greater likelihood of PRRP voting, because it strengthens support for their exclusionary nativist ideology in the form of ethnic nationhood and anti-Muslim sentiments. I tested this prediction in a survey study among a representative sample of native majority members in the context of the Netherlands (N = 1730), which has a successful PRRP called 'the PVV'. Results from a logistic regression mediation analysis supported this prediction. I will discuss the implications for the social psychology of populism.

## Gender, children's bullying, motivation and nostalgia

# Counter-stereotypicality of gender comparisons eradicates focalism in the claims' interpretations

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People seem to interpret intergroup comparisons as if these are solely about the group being compared (focalism). For example, people interpret 'women are warmer than men' as 'women are warm'. However, one limitation of focalism research thus far is that the stimulus claims typically reflected stereotypical beliefs. To examine if stereotype-consistency moderates focalism, we compared responses to claims about men and women, contrasting gender comparisons and single-gender descriptions. As most people distinguish between two genders, even single-group descriptions refer to comparisons and the terms 'referent' (alternative gender) and focalism apply. Importantly, the claims were stereotypical vs. counter-stereotypical. Participants rated how true they were and to which extent the claimant conveyed a message about either gender (direct measure of focus). They also generated arguments for or against the claims, and we counted references to targets and referents (indirect measure of focus). Both focus measures showed that the claims were generally understood as being more about targets than about referents. However, this focalism was less clear-cut than has often been assumed. It was smaller in gender comparisons than in single-gender descriptions, and the two claims were not judged to be equally true (gender comparisons seeming less true). Focalism was also much lower in counter-stereotypical than stereotypical claims. Participants even understood counterstereotypical gender comparisons as more about the referent than the target. Our findings imply that people interpret counter-stereotypical messages different from stereotypical messages. The reversed focalism may help understand why it is often so difficult to change stereotypes through counter-stereotypical verbal communication.

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#### Gender, children's bullying, motivation and nostalgia

## **Intersectional Needs for Gender Diversity Interventions**

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Floor Rink, Organizational Behavior, University of Groningen
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Gender diversity interventions are widespread in organizational settings, but often fail to consider the heterogeneity of women and their respective differences in marginalization. This renders non-prototypical women, such as women holding intersectionally marginalized identities, unconsidered.

To address these shortcomings, we examined if different subgroups of women held different intervention needs across two studies. In study 1, single marginalized status (i.e., White women) and double marginalized status women (i.e. Black women, and Asian women) viewed a fictitious gender intervention. The participants responded to open-ended questions about what they required from such an intervention. The responses were coded to identify recurring intervention needs per ethnic group. Study 2 reproduced the findings of study 1 through a ranking study that asked participants to rank the intervention needs identified in study 1.

Women of color markedly appealed for intersectional considerations in the intervention, namely, through multicultural representation, and including racialized gender issues. Some responses also showed intervention needs coinciding with racialized gender stereotypes of each ethnic group (e.g., White women reported seeming incompetent more than Asian women, Black women were less concerned with issues of agentic deficiency). Study 2 replicated that multicultural representation and racial considerations were the most highly prioritized intervention needs by the women of color.

These studies suggest unique intervention needs disaggregated by ethnicity among women, and intervention needs informed by multiple sources of marginalization. These insights in intervention needs may help clarify gender interventions' mixed findings of effectiveness by connecting intersectional tenets to the design of gender interventions.

Symposium: Gender in context: Understanding how social and cultural contexts shape men and women's experiences and behavior

Gender in context: Understanding how social and cultural contexts shape men and women's experiences and behavior

Organizer: Lianne Aarntzen, MSc (University of Utrecht, The Netherlands)

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#### General abstract

Work and family outcomes are still different for women versus men. For example, men are still overrepresented in influential positions at work, whereas on average women still contribute more to childcare than men. In this symposium, we propose that the context (i.e., culture and direct environment) in which men and women are embedded shapes their experiences and choices, and thereby plays a crucial role in understanding gender differences in outcomes. First, we illustrate how cultural contexts may shape parental experiences. Presentation 1 provides insight in cross-national variation in intensive mothering norms and shows how national indicators (e.g. maternal leave policies) shape how these intensive mothering norms are experienced. Presentation 2 shows how national norms (e.g., country-level implicit gender stereotypes) may instigate high work-family guilt in mothers and protect fathers from work-family guilt, possibly resulting in gendered workfamily choices. Next, we focus on how cultural contexts may affect close relationships. Presentation 3 shows that non-traditional couples, in which women earn more than their male partner, report lower relationship quality than traditional couples but only in more traditional countries not in more egalitarian countries. Last, we outline the importance of social context when empowering women. Presentation 4 shows that intimate partner violence is related to less decision-making power on larger expenditures, a traditional masculine domain, among women in Vietnam and Bolivia. These presentations together provide insight in how men and women's experiences and behavior are shaped by their context.

Symposium: Gender in context: Understanding how social and cultural contexts shape men and women's experiences and behavior

## A cross-national investigation of intensive parenting norms

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Intensive mothering norms prescribe parents to be fully devoted to their role as a mother, put their children's needs first, and raise their children in line with the many do's and don'ts of caregiving. While such norms aim to ensure the best for today's children, their high standards have been shown to involve costs: mothers who feel pressured to be 'perfect' experience more maternal guilt and stress, lower self-efficacy beliefs, are at risk of depression and parental burnout, and show decreased career ambitions. While their consequences have been well-documented, far less is known about what constitutes intensive mothering norms in a society and their prevalence across the world. Using unique data of the UCOM study in more than 50 countries worldwide, we examine cross-national variation in experienced intensive mothering norms and look at national indicators (female employment, maternal leave policies, individualism, birthrate) related to more or less intensive mothering norms. Moreover, as gender norms are changing and men are taking on more childcare roles, we explore the extent to which men experience pressure to be a perfect father and national factors (paternal leave policies, egalitarianism) related to these experiences. Together, this research increases insight in the normative processes that affect parenting as well as gendered patterns therein.

Symposium: Gender in context: Understanding how social and cultural contexts shape men and women's experiences and behavior

## Fathers' and mothers' work-family guilt in cross-national perspective

Lianne Aarntzen, Tanja van der Lippe, Elianne van Steenbergen, & Belle Derks

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Gender differences in work-family decisions often develop or are magnified after men and women become parents (e.g., after having a baby mothers, but not fathers, often decrease their paid working hours). Recently, it has been shown that higher work-family guilt in mothers compared to fathers may in part underly why men and women make these different work-family 'choices'. The question remains why these gender differences in guilt arise. Using the European Sustainable Workforce Survey with data from working parents in nine European countries (N = 1292), we examined whether the cultural endorsement of traditional parenting norms could account for higher work-family guilt in mothers than fathers across nations. We used three different indicators of traditional parenting norms 1) nation-level implicit gender-career stereotypes 2) the nation-level gender gap in women and men's full-time employment rate, and 3) the nation-level explicit endorsement of intensive mothering norms. We predicted that the strength of each of these indicators of traditional norms at a national level would be positively related to the extent to which gender differences in work-family guilt are observed in that culture. Results offer insight in how sociocultural factors may shape gender differences in guilt, possibly resulting in gendered work-family choices and different outcomes for men and women.

Symposium: Gender in context: Understanding how social and cultural contexts shape men and women's experiences and behavior

### Why National Context Matters When Women Surpass Their Partner in Status

Melissa Vink, Tanja van der Lippe, Belle Derks, & Naomi Ellemers

Utrecht University

There is growing evidence that couples in non-traditional relationships in which the woman attains higher status than her male partner experience more negative relationship outcomes than traditional relationships, because gender stereotypes persist and prescribe men to be the breadwinner and women to be the main caregiver of the family. In the current study, we investigated whether the endorsement of traditional gender stereotypes in a country predict relationship outcomes of men and women in non-traditional relationships (characterized by women's income, education level and working hours relative to their male partner). We used the European Sustainable Workforce Survey (ESWS), a multiactor organizational survey that is conducted among 11,001 employees in 259 organizations in nine different European countries. Furthermore, we used two indicators of the endorsement of gender stereotypes in a country: a social-psychological indicator (i.e., using data of Project Implicit to assess implicit gender stereotypes) and a sociological indicator (Gender Empowerment Measure; GEM). We found that especially women's income and educational degree relative to their male partner negatively impaired relationship outcomes such as relationship quality, experienced negative emotions and time pressure. Furthermore, men and women living in more traditional countries reported lower relationship quality when they were in a relationship in which the woman earns more than her partner, whereas this was not the case for participants living in egalitarian countries. The national context thus constrains individuals towards traditional relationships in which the man is the one with the highest status of both partners.

Symposium: Gender in context: Understanding how social and cultural contexts shape men and women's experiences and behavior

A relational perspective on women's empowerment. The influence of marital partners on empowerment among women in Vietnam and Bolivia

Marloes Huis<sup>1</sup>, Nina Hansen<sup>1</sup>, Sabine Otten<sup>1</sup>, & Robert Lensink<sup>1,2</sup>

Women's empowerment is an important goal to achieve sustainable development worldwide. It is defined as the process through which women acquire and use resources in an agentic manner to reach certain achievements, which have so far been denied to them. To date, research has mainly studied women's empowerment by assessing personal (e.g., self-esteem) or relational (e.g., decision-making) empowerment indicators. Women are not isolated individuals; they are embedded in social relationships. Studying women as individuals separated from their social contexts neglects the social structures that influence women's position. This is especially relevant in more collectivist societies. The current research provides a relational perspective on how husbands may hamper women's empowerment by inflicting intimate partner violence (IPV) and showing controlling behavior. We tested the link between self-esteem and experienced IPV (and controlling behavior) on financial intra-household decision-making power among women in Northern Vietnam  $(N_{Study1} = 1518)$  and Bolivia  $(N_{Study2} = 496)$ , both collectivistic societies undergoing economic development. As expected, self-esteem (and not IPV) was positively related to more power in intra-household decision-making on small expenditures, which are traditionally taken by women. However, IPV (and not self-esteem) related to less decision-making power on larger expenditures, traditionally a domain outside women's power. In Study 1, we report two measurement points. We test and discuss the directionality of the effects and stress the importance of considering women's close relationship when investigating signs of women's empowerment. We argue that gendered power imbalances may need to be addressed when aiming to stimulate social change towards gender equity.

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# Thursday 15.00-16.00 (Novel) Methods

The Influence of Data Trimming and Transformation on Results and Conclusions in Reaction-Time-Based Tasks: The Case of Breaking Continuous Flash Suppression

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Breaking continuous flash suppression (b-CFS; Stein, 2019) is a reaction-time-based measure that has been established as an important tool in the study of consciousness and stimulus detection. In recent years, it also gained popularity in the study of person perception. Even though we learned a lot from studies employing b-CFS, there are only few studies investigating the theoretical and statistical underpinnings and implications. Past re-analyses of b-CFS studies indicate that the results and conclusions vary if you change even small aspects of the data pre-processing and analysis pipeline. Therefore, it is important that researchers pay more attention to the effects data trimming and transformation has on their findings and conclusions. In the present talk, we will draw on 101 studies employing b-CFS to (1) highlight between-study variability in pre-processing and analysis of reaction time data (2) discuss the theoretical reasoning behind popular pre-processing choices and (3) show that transformations and outlier trimming massively influence results and conclusions. This effect holds across multiple datasets and for Frequentist, Bayesian and meta-analytic analysis approaches. Finally, we will discuss several implications for researchers employing b-CFS and other reaction-time-based measures to promote theoretically grounded, replicable, and open data pre-processing and analysis.

# Thursday 15.00-16.10 (Novel) Methods

### Moral relevance of big data technologies: moral to some, but not others

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Privacy violations related to big data technologies appear to evoke moral concerns. However, not everyone may find these technologies morally relevant. Based on the integrated theory of moral conviction, we use a bottom-up approach for evaluating moral relevance rather than assuming these technologies are normatively moral as previously done. In study 1, across six domains (criminal investigation, crime prevention, citizen scores, healthcare, banking, employment), we find variation in whether people find big data technologies morally relevant. This variation is due to individual differences and an interaction between individual and domain, but not the domains themselves. Controlling for non-moral dimensions of attitude strength (attitude extremity, certainty, centrality, importance) popularly used in attitude literature, we find a unique effect of moral conviction on cognitive (universality), affective (anger, contempt, disgust) and behavioral (political activism, willingness to support/punish) consequences. In study 2, we aim to explain reasons for variation in moral relevance of these technologies. We study individual variation at various levels: differences in big five personality traits, thinking styles (e.g., cognitive closure), privacy concerns and justice sensitivity. To investigate the domain-individual interaction, we examine people's perceptions towards specific domains: trust in the respective institutions, perceived risks/benefits, and emotional reactions that drive moral conviction towards each domain. These results have implications in understanding how cognitive, affective, and behavioral consequences make it difficult to persuade a morally convicted individual to see the opposite perspective. Understanding what drives this variation will help improve interventions used to persuade individuals that show resistance to other points of view.

# Thursday 15.00-16.10 (Novel) Methods

### The mobile AAT and intergroup biases

Hilmar G. Zech, Leiden University

Lotte F. van Dillen, Leiden University

Wilco W. van Dijk, Leiden University

In this individual presentation, we will give an interactive live demonstration of the mobile approach-avoidance task and present novel data on approach-tendencies toward majorities and minorities living in the Netherlands. Approach-tendencies are action tendencies which drive people to approach environmental stimuli. These tendencies are measured by comparing the time it takes participants to approach a stimulus with the time it takes them to avoid the stimulus. Shorter reaction times during approach movements indicate approach-tendencies. In this presentation, we will focus on approach-tendencies toward minorities and majorities and present a new mobile measure, the mobile approachavoidance task (AAT). During the mobile AAT participants are presented with pictures on a regular smartphone. They approach some pictures by pulling the phone toward themselves and avoid others by pushing the phone away. During each movement reaction times (RTs) as well as reaction forces (RFs) are measured. In this presentation, we will demonstrate the mobile AAT by asking the audience to complete a short AAT with faces of people from different ethnic backgrounds on their own phone. Next, we will analyze the data live and present the audience with their own intergroup approach tendencies. Finally, we will present data from our own lab in which we assess intergroup approach-avoidance tendencies of Dutch and Moroccan participants living in the Netherlands.

# Thursday 15.00-16.10 (Novel) Methods

# Effects of being watched on a sensitive laboratory measure of pro-environmental behavior: a Registered Report

Cameron Brick<sup>1,2</sup>, Florian Lange<sup>3</sup>, Siegfried Dewitte<sup>3</sup>

Individuals have to navigate the tension between selfish and prosocial behavior. This tension is useful for testing psychological theories of prosociality, and understanding it is central to addressing social dilemmas and environmental issues like climate change. Many accounts suggest that individuals act more prosocially when being watched. However, these previous observability studies mostly relied on artificial manipulations (e.g., 'watching eyes' posters) and generally relied on limited measures of prosociality such as hypothetical intentions or low-cost actions like risking the absence of an additional study reward. Finally, previous outcome measures were almost always financial. In contrast, a recently validated laboratory procedure of repeated environmental dilemmas allowed us to test whether the presence of actual observers would affect costly prosocial behavior. In this dilemma task, participants repeatedly chose between minimizing the actual length of the laboratory session vs. minimizing wasted energy and pollution from a bank of lights. Participants were randomized to have their choices be either private or made in the presence of actual observers. We hypothesized that participants would act more prosocially (conserve more at personal cost) when their choices were observed. By rigorously probing the effect of observability under controlled experimental conditions, the study helps reveals how social factors shape prosocial behavior within and beyond the domain of environmental conservation.

<sup>&</sup>lt;sup>1</sup>Department of Psychology, University of Amsterdam, Netherlands

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A social neuroscientific perspective on interactions between groups and individuals

#### Symposium:

A social neuroscientific perspective on interactions between groups and individuals

Organizers: Ilona Domen, Utrecht University, Inga Rösler, Utrecht University

#### **General abstract**

The main aim of this symposium is to demonstrate how different neuroscientific (i.e., EEG, fMRI) and psychophysiological (i.e., cardiovascular) measures can add to the traditional social psychological methods of self-report and measuring behavior. Hereby, we focus on social interactions between groups and individuals, such as performance monitoring, moral judgments between groups, punishment of free-riders, and discussing changing gender relations. Speaker 1 will present an EEG study on performance monitoring, examining the intergroup differentiation in explicit and neural performance monitoring among gender groups. Results show differentiation in performance evaluation on explicit measures, but no intergroup differentiation in neural performance monitoring. Speaker 2, will present an fMRI study, examining reluctancy to punish free-riding. Results show that the opportunity to respond punitively to free-riding activates brain regions associated with motivational conflict, supporting earlier results from behavioral studies. Speaker 3, will present an EEG study, examining how social context (i.e., group-membership of source) influences emotional and attentional responses to being judged on one's morality (vs. competence). Results show that, even though people report being more emotionally affected by ingroup (moral) judgements, they seem to engage in coping mechanisms such as attentional disengagement (measured with EEG) when such messages are conveyed. Speaker 4, demonstrates how psychophysiological measures can be used in a more applied setting; at the Lowlands festival 2019, examining motivational consequences of discussing changing gender roles. Results show an asymmetry between physiological and self-reported responses, especially among males. Together, by using different neurocognitive methods, we give new insights into the underlying neural mechanism involved in social interactions and show different examples of the interplay of behavioral and neuroscientific results (e.g., complement each other, add another perspective).

A social neuroscientific perspective on interactions between groups and individuals

Men set the standard in masculine domains: women's vicarious neural responses when viewing men and women perform a spatial ability task.

Ilona (A.J.H.) Domen, M.Sc., Utrecht University
Belle Derks, Utrecht University
Ruth van Veelen, Utrecht University
Daan Scheepers, Utrecht University/Leiden University

People not only monitor their own behavior, but the behavior of others as well, using similar neural networks in the brain (i.e., performance mirror neuron system; Yu & Zhou, 2006). This system can be influenced by social factors (e.g., neural monitoring is stronger for ethnic inthan outgroups; Xu, Zuo, Wang, & Han, 2009). In this study we focus on gender, and aim to establish intergroup differentiation in performance monitoring (explicit and implicit using neural indicators) as (fe)male respondents (N=54/44) watch gender ingroup/outgroup members make mistakes on a gender-stereotyped task (i.e., spatial ability) and how this is moderated by gender identification. We expected that when a male and female target made the same amount of mistakes on the task, women and men would subjectively evaluate the performance of the female target as better than of the male target, and that this effect would be stronger for high identifiers. We further expected that the performance mirror neuron system is more strongly activated in response to an ingroup (compared to an outgroup) target making a mistake. We found that men subjectively evaluated the performance of the male target as worse than of the female target, while women did not subjectively evaluated the targets differently. Only women with relatively high gender identification reported more sympathy for the female compared to the male target, while there were no effects among men on sympathy. Against expectations, we did not establish intergroup differentiation in neural performance monitoring.

A social neuroscientific perspective on interactions between groups and individuals

### The reluctance to punish free-riding: Evidence from a fMRI study

Welmer Molenmaker, Leiden University

Group cooperation can be exploited by selfish free-riders who refrain from doing their share. Leading theories on how humans overcome this free-riding problem and maintain social order revolve around the idea that cooperators will punish free-riders. Although there is evidence that some indeed bear the costs of punishing those who free-ride on the cooperative efforts of others (e.g., Fehr & Gächter, 2002), we have demonstrated repeatedly that it is not self-evident that humans respond punitively to free-riding – even though free-riders impair the interest of the group – because of a general reluctance to inflict harm on others (Molenmaker, De Kwaadsteniet, & Van Dijk, 2014; 2016). This suggests that free-riding evokes a motivational conflict within individuals: should they punish the free-rider (thereby inflicting harm) or should they let it pass (thereby leaving the opportunity unused to restore justice and/or deter future free-riding)? Here, we present results of a fMRI study revealing that the opportunity to respond punitively to free-riding (as compared to the opportunity to respond rewardingly to cooperation) indeed activates brain regions associated with motivational conflict (e.g., dACC). As such, we provide neurological evidence for our central premise that humans are reluctant to punish free-riding.

A social neuroscientific perspective on interactions between groups and individuals

Moral judgments don't get the job done: How social context influences emotional and attentional responses to being judged

Inga Rösler, M.Sc., Utrecht University

Dr. Félice van Nunspeet, Utrecht University

Prof. Dr. Naomi Ellemers

Contrary to the common notion that criticizing people's moral failures evokes behavioral change, we argue that it often has the opposite effect by making people defensive and disregard such feedback entirely. In two studies, we confronted participants with judgments on their morality and competence by either ingroup or outgroup sources, and measured their self-reported emotional responses and attention (Study 1) as well as their motivated attention using EEG (Study 2). Results of Study 1 showed that participants report being more emotionally affected by ingroup as compared to outgroup judgments, regardless of whether those judgments were related to their morality or competence. Additionally, they reported to pay as much attention to ingroup as to outgroup judgments in our experimental paradigm. However, the more unconscious and indirect measures (e.g., motivated attention as measured with EEG), showed that people allocate more attentional resources to outgroup (vs. ingroup) sources, and are more motivated to attend to judgments on their competence (vs. morality). Moreover, they report more competence judgments in a free recall task. These results suggest that whereas, or perhaps because, negative (moral) judgements from ingroup members highly affects people emotionally, they seem to show coping mechanisms such as attentional disengagement when such messages are conveyed. Additionally, these seemingly contradicting yet complementing findings, show the added value of combining more traditional social psychological measures with neuroscientific research methods.

A social neuroscientific perspective on interactions between groups and individuals

The Motivational Consequences of Changing Gender Relations: A Psychophysiological Field-study at Lowlands

Daan Scheepers, Utrecht University / Leiden University

One of the factors hindering social change is the threat it poses to members of high-status groups. Physiological threat responses resulting from social change can emerge autonomously and be hard to control, even among those who seem—at a conscious level—pro-change.

In the current presentation I present a psychophysiological study we conducted at Lowlands. Male and female participants discussed changing gender relations. We measured both self-reported attitudes towards change, as well as cardiovascular markers of task effort and challenge and threat motivational states while discussing change.

Results show an asymmetry between physiological and self-reported responses, especially among males. Participants were generally pro-change. However, while females showed strong task engagement and a cardiovascular response profile indicative of challenge, these tendencies were less strong among males.

The asymmetry between attitudinal and physiological responses to social change are discussed in terms of the different experiences that men and women have with gender inequality. We also discuss some of the practicalities of doing psychophysiological field-research.

#### **Ambiguity and uncertainty**

## The social function of ambiguity: A new methodology to compare online and offline discussions

Carla Anne Roos, Namkje Koudenburg, Tom Postmes
University of Groningen

Why might online discussions about controversial issues be more prone to conflict and polarization than similar discussions held face-to-face? In face-to-face discussions, people try to prevent conflict by providing instant relational feedback and expressing their disagreements vaguely. In text-based online environments, however, this is harder to accomplish due to the lack of synchronicity and lack of subtle social cues. Previous research found that social unity among interaction partners can suffer as a consequence. This paper proposes a new methodological approach to exposing these processes more clearly and investigating perceptions of outside observers ("the lukers").

In Study 1 (*N*=103, repeated measures), participants saw video-clips of online and face-to-face group discussions enacted by actors. In Study 2 (*N*=120, repeated measures), participants read transcripts of online and face-to-face discussions. In both studies, participants rated how much interaction partners responded to each other and how clearly they expressed themselves. We also measured participants' perceptions of social concern, solidarity and attitude polarization within the group.

Results showed that participants considered online interaction partners less responsive and clearer. This seemed to feed participants' impressions of reduced social concern, reduced solidarity and increased polarization. Thus, lurkers clearly notice the lack of responsiveness and lack of ambiguity in online expression and appear to conclude from this that interaction partners must be in conflict.

We conclude that enacting online and transcribing face-to-face discussions accentuates differences in the conversational form and micro-dynamics of these media. These subtle differences appear powerful in shaping lurkers' impressions of social unity among interaction partners.

#### Ambiguity and uncertainty

Effectiveness of social influence under choice uncertainty: a mouse-tracker paradigm applied to indifference and ambivalence

Tina A.G. Venema<sup>a</sup>, Floor M. Kroese<sup>b</sup>, Jeroen S. Benjamins<sup>b</sup> & Denise T.D de Ridder<sup>b</sup>
<sup>a</sup> Aarhus University, Denmark, <sup>b</sup> Utrecht University, The Netherlands

Although nudges are designed to facilitate sensible choices without interfering with people's prior preferences, both the relation between prior preferences and nudge effectiveness, and the facilitating effect have received little empirical scrutiny. Two studies examine the hypothesis that a social proof nudge is particularly effective when people have no clear prior preference, either because they are indifferent (in a color-categorization task; Study 1, N = 255) or because they experience a choice conflict (making shopping decisions about meat products; Study 2, N = 100). Both studies employed a social proof nudge to steer people's choices. Its potential facilitating effect was tested using a mouse tracker paradigm that implicitly assessed experienced uncertainty during choice making. Results showed that the nudge was effective; the facilitation effect (i.e., reduced choice uncertainty) was observed only when there were conflicting preferences, not under indifference. It is important to further study moderators of nudge effectiveness.

#### **Ambiguity and uncertainty**

#### **Confidence in Values and Value-based Choice**

Julian Quandt, Harm Veling, Rob W. Holland, Bernd Figner

Affiliation: Behavioural Science Institute, Radboud University

When people make decisions in everyday-life, these decisions are usually accompanied by a feeling of confidence whether the choice that was made was correct. For example, a person can feel more or less confident to have given the correct answer on trivia-question. It is commonly believed that for a given decision problem, confidence reflects the clarity of the evidence that a decision was based on. This is, decisions in which the evidence is less clear (e.g. conflicting information about a trivia-question) result in lower confidence. It has been shown that confidence predicts how likely people are to stick with an opinion or how likely they are to engage in related future decision-scenarios.

However, confidence has not yet been extensively studied in common value-based decision problems in which people evaluate, or decide between objects such as foods or other consumer goods. It has been suggested that in these decisions, the evidence that people use are prior experiences with the goods. However, it is still unknown how confidence is constructed from these experiences when evaluating or choosing between objects. In three preregistered experiments (n = 62, n = 60, n = 60) we investigated the question whether confidence reflects the diversity of prior experiences with objects and how they relate to choice-behavior. We find that for novel and real-life food objects, more diverse prior experiences relate to lower confidence when evaluating objects and deciding between them. This is relevant to understanding consumption-behavior and attitude formation and stability.

#### **Ambiguity and uncertainty**

### The effects of communicating uncertainty on public trust in scientific numbers

Author: Anne Marthe van der Bles, University of Groningen, a.m.van.der.bles@rug.nl
Co-authors: Sander van der Linden, Alexandra Freeman & David Spiegelhalter, Winton
Centre for Risk and Evidence Communication, University of Cambridge

Uncertainty is an integral part of science, statistics, and measurement. Yet in a post-truth world in which (political) ideologies can trump quantitative evidence and scientific reasoning, there can be anxiety among scientists, experts, and policy-makers that highlighting uncertainty about scientific facts and numbers will only serve to further decrease trust and credibility. Yet, a lack of systematic research makes it difficult to evaluate such claims. We conducted four experiments—including one preregistered replication with a national sample—(total N = 4102) to examine whether communicating epistemic uncertainty about facts across different topics (e.g. global warming, immigration) and formats (verbal vs. numeric) influences people's trust in numbers and in the people producing these numbers. Results show that whereas people do perceive greater uncertainty when it is communicated, we observed only a small decrease in trust in numbers and trustworthiness of the source, and mostly for verbal uncertainty communication. We also examined whether people's prior beliefs about the topic might influence these effects. The results showed that while prior beliefs did influence trust in numbers, they did not alter the effects of uncertainty communication. These results inform the debate around openness and transparency about the limits of scientific knowledge in science communication.

**Symposium: Morality and Justice** 

#### Symposium:

#### **Morality and Justice**

Organizer: Ana Leal, University of Groningen

#### **General Abstract:**

Morality is a fundamental pillar of societies and is often rooted in contexts of social justice and inequality. In this symposium, we present a set of projects that aims to understand the social and psychological underpinnings of morality and/or justice-oriented behavior. From a societal perspective, the first paper examines how perceptions of chronic collective injustice (i.e., gas extraction and subsequent earthquakes in the Netherlands) may motivate collective action. Specifically, how ingroup (rather than outgroup) oriented actions may function as a collective means of responding to injustice. The second paper examines the interaction between moral beliefs and intra-intergroup action against inequality in a twoyear longitudinal study. Particularly, how participation in collective action longitudinally shapes individuals' moral conviction, and how moral conviction predicts collective action. From a group-level system analysis, the third paper conceptualizes moral belief systems as networks and investigates the moral basis of the educational divide. Specifically, it examines whether and how the moral systems of liberals and conservatives who are higher or lower educated are differently structured. From a relational perspective, the fourth paper suggests that morality is best analyzed within relationships. It examines how people (from different cultures) morally and emotionally react to moral violations as a function of the relational model in which those violations occur. Finally, these projects seek to advance our understanding of morality and social justice by also combining different methodological and analytical approaches: qualitative and quantitative research (paper 1), longitudinal design (paper 2), network analysis (paper 3), and cross-cultural analysis (paper 4).

**Symposium: Morality and Justice** 

Orienting inwards in times of collective injustice: Alternative forms of 'collective action' in response to man-made disaster

Katherine Stroebe

University of Groningen

Does chronic collective injustice induce collective action? For the past four years I have been studying the psycho-social consequences of a man-made and chronic disaster: the gas extraction and subsequent earthquakes in the North East of the Netherlands. Despite strong perceptions of injustice in response to the gas extraction, little collective action has taken place in this region. In this talk I discuss how to explain this lack of collective action both in the context of this chronic disaster as well as from a scientific perspective. Little work considers what people are doing when they do not mobilize in response to collective injustice. Whereas the collective action literature traditionally defines collective action as an attempt to redress injustice by engaging in competition with the outgroup, other work, such as that on the collective experience of emotions (Rimé, 2009) and on responses to acute disasters (Drury et al., 2009) point to alternative forms of 'ingroup oriented' actions (i.e., communication with others, helping others) as a way of dealing with stressful life events. These actions are collective but are ingroup rather than outgroup oriented and do not directly redress injustice. The present work is based on the idea that ingroup oriented responses could be a collective means of responding to injustice thus far not considered within the collective action literature. In the present talk I present qualitative and quantitative research testing this idea. Theoretically, this talk will provide a broader spectrum of actions so far not considered within the separate literatures.

**Symposium: Morality and Justice** 

The Yin and Yang of social change: The interplay between participation in collective action and moral conviction in a 2-year longitudinal study

Ana Leal<sup>1,2,3</sup>, Martijn van Zomeren<sup>1</sup>, Ernestine Gordijn<sup>1</sup>, Michal Reifen Tagar<sup>2</sup>, Eran Halperin<sup>3</sup>, Roberto González<sup>4</sup>, and Belén Alvarez<sup>4</sup>

<sup>1</sup>University of Groningen, <sup>2</sup>IDC Herzliya, Israel, <sup>3</sup>Hebrew University, Jerusalem, Israel, <sup>4</sup>Pontificia Universidad Católica de Chile

Collective action and moral conviction are two key driving forces for social change. However, we know very little about the consequences of undertaking collective action and the antecedents of moral conviction. In the current research, we conceptualize participation in collective action and moral conviction as part of a dynamic and bidirectional process to achieve social change. First, in line with previous work, we expect that moral conviction (i.e., individual fundamental beliefs about right and wrong) motivates participation in collective action through identification, anger, and efficacy beliefs. Second, we propose that participation in collective action validates one's identification with the group, group-based anger, and group efficacy beliefs, and thus strengthens one's moral convictions. We conducted a five-wave longitudinal study (N = 1214) in the context of the Chilean student movement for two years. We examined the longitudinal effects of participation in collective action on moralization of one's attitudes (i.e., increased changes in moral conviction) and vice versa. Moreover, we tested some mechanisms that could explain these effects (identification, anger, and efficacy beliefs). We found that participation in collective action longitudinally predicted greater moralization, and at the same time, moral conviction longitudinally predicted participation in collective action. Additionally, we found evidence for the underlying mechanisms, being identification the strongest one. Theoretical implications for the literature on collective action, moral conviction, and moralization are discussed.

**Symposium: Morality and Justice** 

A moral educational divide? Applying network analysis to compare the structure of moral foundations in liberals and conservatives who are higher educated and less educated

Felicity M. Turner-Zwinkels<sup>1</sup> and Mark J. Brandt<sup>1</sup>

<sup>1</sup>Tilburg University

Education is a key social divide in Western societies. We investigate the moral basis of this divide, by using Moral Foundations Theory (MFT; Graham, Haidt & Nosek, 2009) and network analysis to test if the moral systems of high and low educated people are differently structured. This approach conceptualizes moral systems as networks, with specific moral beliefs represented as nodes connected by direct relations. Specifically, we test MFT's claim that (a) liberals moral systems will show more segregation between individualizing and binding foundations than conservatives, and (b) this pattern will be more typical of higher educated than less educated liberals/conservatives. We do so, in three large datasets (N<sub>sample</sub> 1 = 854; N<sub>sample 2</sub> = 679; N<sub>sample 3</sub> = 2572), from two different countries (the U.S. and New Zealand). Results support our first hypothesis, showing that within liberal moral belief systems individualizing and binding foundations generally cluster separately and were more weakly connected than they are within conservative moral belief systems. Results also partially support our second hypothesis, that moral systems for higher educated liberals were more prototypical of MFT predications (i.e., with fewer and weaker connections between individualizing and binding foundations) than lower educated liberals. However, no consistent differences were found between lower and higher educated conservatives. These findings present new support for a systems approach to MFT and show the value of modelling moral belief systems as networks.

**Symposium: Morality and Justice** 

People respond with different moral emotions to violations in different relational models:

A cross-cultural comparison

Yasin Koc<sup>1</sup>, Diane Sunar<sup>2</sup>, Sevim Cesur<sup>3</sup>, Zeynep Ecem Piyale<sup>4</sup>, Beyza Tepe<sup>5</sup>, Ali Furkan Biten<sup>6</sup>, and Charles Hill<sup>7</sup>

<sup>1</sup>University of Groningen, <sup>2</sup>Istanbul Bilgi University, <sup>3</sup>Istanbul University, <sup>4</sup>Işık University, <sup>5</sup>Bahçeşehir University, <sup>6</sup>Autonomous University of Barcelona, <sup>7</sup>Whittier College

We argue that morality is best analyzed within relationships rather than in individuals, proposing that (1) judgments of moral violations vary according to the relational model (RM) in which they occur (Communal Sharing, Authority Ranking, Equality Matching, or Market Pricing; Fiske, 1992); (2) consonant with a functional view of moral emotions, violations in different RMs will arouse different intensities of other-blaming emotions (anger, contempt and disgust) in both observers and victims, together with different intensities of self-blaming emotions (shame and guilt) in the perpetrator; (3) these patterns of emotion will show similarity both across individuals and across cultures. Three studies, using vignettes portraying moral violations in all RMs in different experimental designs, supported all three expectations. The intensity of all three other-blaming emotions varied across RMs. Shame and guilt also varied markedly across RMs, but with little difference between the two emotions. Anger was the most intense emotional response to violation in all RMs, while disgust and contempt were stronger in CS than in other RMs. Disgust and shame were linked more strongly in CS than in other RMs, and in EM, anger and guilt were more strongly linked than other emotion pairs. Moral emotions in RMs involving hierarchy (AR and MP) varied widely depending on the perpetrator's relative status. Both Turkish (TR) and Englishspeaking (EN) samples showed similar patterns of all moral emotions across RMs. Understanding the functions of moral emotions in relationships using relational models can help clarify multiple aspects of moral psychology.

**Symposium: Person Perception** 

#### Symposium:

#### **Person Perception**

Organizers: Bastian Jaeger<sup>1</sup> & Gijs Bijlstra<sup>2</sup>

<sup>1</sup> Tilburg University, Department of Social Psychology;

<sup>2</sup> Radboud University, Behavioural Science Institute.

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#### Symposium abstract

Due to the interdependent nature of our social world, people use a wide variety of cues to form impressions of others. Faces are a particularly important source of information, as they convey information about a person's identity, demographic characteristics, and emotion. It is therefore not surprising that faces are detected and processed very rapidly and efficiently. However, this sensitivity to pick up on socially relevant cues also leads people to infer more complex psychological characteristics (e.g., trustworthiness) from faces—often with limited accuracy. In short, people rely on various observable cues to form judgments of others and these judgments guide many everyday behaviors. In the current symposium, we will showcase recent findings in the field of person perception. The talks examine each stage of the person perception process, ranging from the detection of faces to the influence of facebased impressions on decision-making. The first talk focuses on the initial detection of faces of in- and outgroup members using the bCFS paradigm. The second talk examines how context influences emotion perception, using behavioral and EEG measurements. The third talk investigates how people form personality impressions of others, asking whether people who correct others' misconceptions seen less favorably. Finally, the fourth talk provides an account of why people persistently rely on personality impressions in spite of their low diagnostic value. The four presentations provide the state-of-the-art in person perception research and aim to inspire others by offering new theoretical as well as methodological insights from this field.

**Symposium: Person Perception** 

### Top-down processes affect face detection

Gijsbert Bijlstra, Maximilan Primbs, Farnaz Mosannenzadeh, & Rob Holland Radboud University, Behavioural Science Institute

Faces have a special role in daily life. Humans, for example, seem to have an innate attentional preference for faces over other objects. More specifically, studies have shown that people prefer faces of their own ethnic group over faces of other ethnic groups. It is likely that such bias results from familiarity with ingroup faces. In this talk, the central question is whether the social context, e.g. group-vigilance, can influence this process. I will present a series of preregistered studies, in which we investigated the modulation of the robust in-group bias in face detection. Employing a breaking Continuous Flash Suppression (bCFS) paradigm, we first replicated the in-group bias (Study 1, N = 24). Caucasian students were faster in detecting Caucasian faces than Moroccan and Asian outgroup faces. In Studies 2-3, we manipulated the (I) self-relevance of Moroccans by inducing threat, using an ISIS news item (Study 2, N = 20) and (II) increased conceptual salience of Moroccans using a news item that covered a market place in Marrakesh (Study 3, N = 50). We found evidence that both self-relevance and conceptual salience affected the detection of relevant outgroup faces. That is, detection of Moroccan, but not Asian, outgroup faces was enhanced. In Study 2, the ingroup bias was even absent compared with the Moroccan faces. Overall, the present research provides novel evidence for the influence of top-down processes, i.e. selfrelevance, on detecting facial stimuli.

**Symposium: Person Perception** 

Contextually induced emotion: "Seeing" emotion where there is none

Marte Otten

University of Amsterdam, Department of Brain & Cognition

Say, you see your collaborator frowning while you are talking to them. Are they disagreeing with you, or are they just thinking hard about what you just said? Social perception, including the perception of other peoples' facial expressions, often seems to be a constructed experience. To understand social stimuli, the perceiver combines sensory input with the wider social context and stored knowledge of the social world. Models of perception based on hierarchical prediction suggest that such top-down factors not just shape late interpretation of sensory input: This framework suggests that contextual predictions ('priors') form the basis of early sensory perception. Applied to social perception, this suggest that social context can directly change the earliest perceptual stages of social stimuli. Here I explore this hypothesis by looking at contextually induced emotions: neutral faces that appear more emotional based on the social contextual information that participants have. I will present electro-encephalogram data, based on event-related potentials (ERPs) and decoding algorithms, that compare contextually induced emotional faces with faces that show real emotional expressions. If context-induced emotions result from contextual predictions directly shaping visual processing, then early electrophysiological activation related to sensory processing should show similar modulation for real-emotion faces and induced-emotion faces. If, on the other hand, the experience of the induced expressions is the result of later integration of the sensory input within the social context, then effects related to the early visual processing of the real-emotion faces should not be present in the induced-emotion faces.

**Symposium: Person Perception** 

### The social cost of correcting others

Willem Sleegers, Bastian Jaeger
Tilburg University, Department of Social Psychology

Misconceptions, i.e., knowledge and beliefs that are incongruent with core scientific concepts and empirical findings, are common and persistent. To this day, many believe that Napoleon was short, that vitamin C protects against the common cold, or that ostriches stick their heads in the sand when they sense danger. These misconceptions come from a variety of sources, including popular media and textbooks, and spread through mouth-to-mouth communication. But while mouth-to-mouth communication may be one way for misconceptions to spread, it is also where they could be corrected by others. But how likely is it that people correct others? We believe that people often refrain from correcting others because of a fear of negative social evaluation. Across three studies, we investigated how correctors are perceived in terms of their competence, morality, and, importantly, their sociability. While we found no consistent evidence for a negative evaluation of correctors in terms of competence or morality, we found that correctors tend to be rated as less sociable. These results suggest that people may refrain from correcting others and contribute to the spread and persistence of misconceptions.

**Symposium: Person Perception** 

Lay beliefs in physiognomy predict overreliance on first impressions

Bastian Jaeger<sup>1</sup>, Anthony M. Evans<sup>1</sup>, Mariëlle Stel<sup>2</sup>, Ilja van Beest<sup>1</sup>

<sup>1</sup>Tilburg University, Department of Social Psychology

<sup>2</sup> University of Twente, Department of Psychology of Conflict, Risk, and Safety

People spontaneously judge a person's character based on their facial appearance. In spite of their generally low accuracy, trait impressions from faces influence a wide range of consequential decisions, such as criminal sentencing, voting, and personnel selection. This overreliance on first impressions not only leads to worse decision outcomes, but also to systematic biases against people of a certain appearance. Why do people persistently rely on first impressions, even when better information is available? Here, we examine the role of lay beliefs. Beliefs in the core tenet of physiognomy—that personality traits are reflected in facial features—are widespread among students (Study 1a, n = 375) and the Dutch population in general (Study 1b, n = 2,466). People who endorse physiognomic beliefs are more confident in the accuracy of their first impressions (Study 2, n = 406), but this is not due to superior judgment accuracy. Moreover, people who endorse physiognomic beliefs rely more on first impressions when making trust decisions (Study 3, n = 224). Together, our results show that lay beliefs in the diagnostic value of facial appearance for inferring personality traits contribute to the widespread effects of first impressions.

#### Sustainability

"When guilt brings on positive change: Applying a network approach to attitudes in changing consumer behaviour towards plastic."

Maria V. Zwicker, University of Amsterdam
Hannah Nohlen, University of Amsterdam
Frenk van Harreveld, University of Amsterdam

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In a time of rapid climate change, understanding what may encourage sustainable behaviour is a vital, but difficult task. Using an attitude network approach, we investigated which beliefs people hold toward regular and bio-based plastic in order to develop an empiricallybased approach to attitude- and behaviour change. With a qualitative study (N = 95), we distilled 25 aspects (i.e. cognitions, emotions) that contribute to people's attitude toward using (bio-based) plastic. Subsequently, these aspects were tested among 508 online participants. This data was used to build a network displaying relationships between participants' attitude, feelings, and behaviour regarding plastic use. Above all, guilt was most strongly connected to people's willingness to pay more for bio-based products. Based on this, we conducted another study (N = 285) in which we manipulated guilt (general guilt, personal guilt, and control condition) to determine its effects on people's willingness to pay for a sustainable cause. Results show that manipulating guilt indeed led participants to donate more to a sustainable cause. This effect was fully mediated by self-reported guilt. Determining which factors influence consumers to change their buying behaviour towards sustainability is the first step in creating a demand for more sustainable products amongst the public and investors.

# Friday 10.00-11.10 Sustainability

# Return of the Philosopher: Investigating pro-environmental behaviour with three competing conceptions of autonomy

Christopher Robin van Rugge, Linda Steg, Russell Spears1, Frank Hindriks University of Groningen

People are more likely to engage in and maintain pro-environmental behaviours if they are intrinsically motivated rather than if they act solely due to extrinsic pressure. The self-determination literature, for example, claims that autonomy is a fundamental requirement for intrinsic motivation. However, philosophy has produced different conceptualisations of autonomy that have different implications for the psychological construct.

Three main forms of autonomy have been synthesized from the philosophical literature. First, self-governance assumes that an individual is acting autonomously only if they believe it is the morally right thing to do. Second, self-authorship (with a personal and a social dimension) assumes that contextual, social and physical circumstances define which mutually exclusive courses of action are autonomous, based on our goals, values and aspirations. Third, volitional resolve assumes behaviour is autonomous if one acts on a desire that one wants to desire.

We conducted a correlational survey study (N=173) to examine whether the three conceptions of autonomy are distinct concepts, to what extent they independently predict intrinsic motivation as well as self-reported actual and intended sustainable behaviour. Confirmatory factor analysis and the multiple group method confirm that the different subscales of autonomy are distinct facets of the concept of autonomy. Additionally, graphical modelling suggests that certain forms of autonomy are better predictors of proenvironmental behaviour in different behavioural domains. We discuss theoretical and practical implications of our findings for understanding, promoting and sustaining intrinsically motivated pro-environmental actions.

#### Sustainability

# Promoting healthy and sustainable consumption behaviour in restaurants: Portioning meat and vegetables

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Current western food consumption patterns are characterized by high consumption of animal foods, i.e. especially red and processed meat, and low consumption of vegetables, which have an impact on both health (i.e., obesity and non-communicable diseases) and the environment (i.e., high demand of natural resources and negative climate impact). Since individuals increasingly consume their meals away from home, out of home settings can play an important role to promote healthy and sustainable dietary choices for people. Insights from behavioural science show that restructuring the environment where people acquire or consume food of individuals exerts a powerful influence on their behaviour. One way in which restructured food choice environments can contribute to healthier and more sustainable meals is by modified portion sizes. We present a series of field experiments that examined the effects of reduced portion sizes of meat and simultaneously increased amounts of vegetables on food consumption and guest satisfaction. We used four real-life restaurant settings in the Netherlands: an a-la-carte restaurant, six company canteens, a self-service restaurant, and a buffet restaurant. The four experiments in these different restaurant settings consistently showed that adapting portion sizes of meat and vegetables was effective to reduce meat consumption and increase vegetable consumption, while maintaining high guest satisfaction. Guest satisfaction even increased when vegetables were presented and prepared in a more attractive and tasty way. Thus, adapting portion sizes of meat and vegetables provides a viable strategy to stimulate healthy and environmentally sustainable consumption patterns in out of home settings.

# Friday 10.00-11.10 Sustainability

# Defaults and Decisions The effects of strategies to increase the uptake of doggy bags

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Marketing and Consumer Behavior Group

Wageningen University

Taking home leftover food from restaurants (i.e. using doggy bags) can result in a paradox between conflicting emotions: asking for a doggy bag generates shame, as it goes against the descriptive social norm in many countries, whereas leaving leftovers generates guilt. The current study examines three influence strategies that may increase the uptake of doggy bags: (1) explicitly offering consumers the option to take a doggy bag, (2) changing the default to taking doggy bags, i.e. providing doggy bags unless customers indicate that they do not want this, and (3) giving consumers a choice between (subordinate) options that imply the default, in this case a choice between two types of doggy bags (paper or plastic). This latter strategy presents the doggy bag as a default, but also preserves consumers' sense of freedom. In a series of experiments, we show that changing the default is an effective strategy to increase the uptake of doggy bags, whereas merely providing the choice is not sufficient to change behaviour. Yet, satisfaction with the restaurant is higher when options where provided. Finally, we show that the likelihood of eating (at least part) of the food in the doggy bag is high (89.3%) and does not differ across conditions. Thus, changing the default can entice people to take home leftover food, which decreases plate waste at the restaurant without transferring it to the home. This has high societal relevance given that food waste has become a global concern in recent years and a political priority.

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Social relations

Friends as tools: the relationship between dispositional greed and social contacts

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Greed is an important motive that affects economic decisions (Lea et al., 1998). This insatiable desire for more can be experienced for both material and non-material things (Seuntjens et al, 2015). Existing research on greed, however, has focused mostly on economic and consumer behavior. So far, little is known about greed in the realm of social relationships, whilst social relationships are an important part of people's daily lives. 'Acquiring' a contact, however, requires (repeated) mutual selection (Newman et al., 2017). Greed is likely to affect relationships, as greedy people often behave immorally and unethically (Seuntjens et al., 2019). Moreover, greedy people score low on agreeableness and high on meanness (Krekels & Pandelaere, 2015; Mussel & Hewig, 2016). They might especially desire functional friends

In this series of studies, we investigate how dispositional greed is associated with various aspects related to social contacts. We make use of both primary (Lab, n = 205; Prolific, n = 503) and secondary (LISS panel 2013/2019, n = 1909-4943) survey data. The greedy individuals objectify their friends, indicating a functional outlook on friendships. At the same time, they feel lonelier, less satisfied with and less close to their social contacts. They are likely to have more sex partners, but these encounters do not seem to result in long-term romantic relationships. Together, these findings are important for understanding the psychology of social contacts, and provide insight into the role of greed in one's social life.

that can fulfill their needs without requiring too much in return.

#### Social relations

People from lower social classes elicit greater prosociality; compassion and deservingness matter

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People form quick impressions of the social class of others, and are likely to adjust their behavior accordingly. If social class is linked to prosociality, as literature suggests, then an interaction partner's class should affect prosocial behavior, especially when costs or investments are low. We address this question using social mindfulness (SoMi) and dictator games (DG) as complementary measures of prosociality. We manipulate target class by providing information regarding a target's (1) position on a social class ladder, and (2) family background. Three studies using online and laboratory approaches ( $N_{\text{overall}} = 564$ ) in two nations (NL, UK), featuring both actual and hypothetical exchanges, reveal that lower-class targets are met with greater prosociality than higher-class targets, even when based on information about the targets' parents (Study 3). This was partially mediated by compassion (Studies 2 and 3) and perceived deservingness of the target (Study 3). Implications and limitations are discussed.

#### Social relations

### Social relations as predictors of health and wellbeing

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Social relations are known to be important predictors of wellbeing and health. Yet different theoretical approaches conceptualise social relations in quite different ways, focusing on (inter-personal) forms of social support, identification with groups, or on social capital. All these concepts have been related to (mental) health outcomes yet diverge in their explanations regarding why there might be such an association. Our research shows that it is empirically impossible to meaningfully differentiate between these concepts. Instead there is a general factor underpinning all social relations, but also separate components relating to specific target groups, such as family, neighbourhood groups, rather than to specific theoretical concepts. The present work investigates the impact of such a new conceptualisation of social relations (into general factor and targets) on health outcomes, specifically mental health, medically unexplained symptoms and general health. Results from a panel study (N=2912) reveal that, targets (in particular Family) seem to be important for general health and medically unexplained symptoms. We find that mental health is strongly associated with a general factor. Interestingly, this means that whereas research largely focuses on the effects of different theoretical concepts in assessing the impact of social relations on health it may be more important to distinguish target groups, and a general factor of social relations rather than these separate concepts. Furthermore, the results raise the question of what a general factor in relation to health actually means.

#### Social relations

#### The Interpersonal Power of Other-Oriented Self-Regulation

Reine van der Wal, Merel Nap-van der Vlist, Eva Grosfeld, Sanne Nijhof, & Catrin Finkenauer Utrecht University, the Netherlands

When families experience severe stress (e.g., due to a child's illness or parental divorce), children and parents often protect each other from further pain and suffering by hiding or downplaying their actual feelings. This process of other-oriented self-regulation can be defined as avoiding talking about the stressor and one's feelings, trying to remain strong in the presence of others. Although its goals is to protect the other, however, research suggests that other-oriented self-regulation backfires with detrimental effects for both, the person engaging in it (the actor) and the person whom one aims to protect (the partner). Using data of children with divorced parents (n = 376 children 16-24 yrs old), and data of children suffering from a chronic disease and their parents (n = 66 dyads), we first tested whether children's engagement in parent-oriented self-regulation is negatively associated with their well-being (actor effect). Secondly, we examined whether parents' engagement in child-oriented self-regulation is negatively related to children's well-being (partner effect). Using actor-partner-independence-modelling, we found both actor and partner effects. In divorce contexts and in families with chronically ill children, engaging more in parent-oriented self- regulation was associated with lower levels of several indicators of children's well-being (i.e., quality of life, subjective health, and loneliness), that is, the actor effect. Moreover, chronically ill children whose parents engaged in more child-oriented self-regulation experienced lower levels of well-being than children whose parents who did not, that is, the partner effect. Together these findings suggest that other-oriented self-regulation is associated with detrimental outcomes for both the actor and the partner, and that the phenomenon generalizes across stressful contexts. Research examining the mechanisms underlying the negative implications of other-oriented selfregulation in interpersonal relationships would be promising.

#### Food

#### Multidimensionality of food neophobia: Variation across meats and plants

Çağla Çınar, Vrije Universiteit Amsterdam, Department of Applied and Experimental Psychology

People vary in their willingness to try new foods. This variation, which is most frequently measured using the Food Neophobia Scale (FNS: Pliner & Hobden, 1992), is thought to be unidimensional. In three studies (N's =210, 306, and 159), we 1) test whether food neophobia is indeed unidimensional, 2) explore sources of variation across two potential dimensions of food neophobia: that toward meat and that toward plants, and 3) test whether separate food neophobia dimensions predict actual eating behavior of a novel food item (i.e., a snack bar that contains insects). Factor analyses indicated that meat and plant neophobia are distinct, with participants demonstrating greater meat (vs. plant) neophobia. Internal meta-analyses revealed that meat and plant neophobia were similarly positively related to pathogen disgust and germ aversion, and similarly negatively related to openness to new experiences and frequency of eating plants. Neither were related to frequency of eating meats. The two dimensions differed in their relations with masculinity, empathy toward animals, and participant sex, with women being more meat neophobic — but not more plant neophobic — than men. Both dimensions of neophobia separately predicted eating a novel insect bar.

Food

### **Hungry for emotions:**

The effect of food deprivation on pathogen-avoidance and food neophobia.

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Although many leading papers in the behavioral immune system literature have proposed that food deprivation downregulates feelings of disgust, evidence supporting this proposition is scarce. Here, we report results from what we believe to be the most comprehensive test of the effects of hunger on pathogen avoidance to date. Participants (N=40) attended two experimental sessions, each following a 15-hour fast, with one conducted immediately after eating a standardized meal in the lab. In each session, they rated 40 different images (i.e., food-related disgust-eliciting, food-unrelated disgust-eliciting, fear-eliciting, neutral, and positive) on valence and arousal while their heart rate and skin conductance responses were recorded. They also indicated their willingness to eat 16 novel foods. Results indicated that nutritional state did not affect subjective and physiological reactions to food-related or food-irrelevant disgust-eliciting images. However, participants reported a greater willingness to eat novel foods after fasting than after eating. These results provide initial evidence that nutritional state does not influence the general processing of pathogens as previously argued, but instead increases willingness to eat novel foods.

#### Food

Social consumption norms underlying the effect of portion size on later food intake

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Portion sizes of commercially available foods have increased, and there is evidence that exposure to portion sizes recalibrates what is perceived as 'normal' and subsequently, how much food is selected and consumed. The present study aims to explore the role of social (descriptive and injunctive) and personal portion size norms in this effect. Across two experiments, participants were either visually exposed to (Study 1, N = 329) or actually served (Study 2, N = 132) a smaller or larger food portion. 24h later, participants reported their intended consumption (Study 1) or served themselves and consumed (Study 2) a portion of that food, and reported perceived portion size norms. In primary analyses, there were no effects of visual exposure to portion size on subsequent perceived norms in Study 1. In Study 2, participants consumed a smaller portion of food when they were served a smaller portion the previous day, which was mediated by perceptions of descriptive and injunctive social (but not personal) norms. Results suggest that consuming (but not visual exposure to) smaller food portions decreases perceptions of both what others typically serve themselves and believe that is the appropriate amount to eat, which reduces future consumption of that food.

#### Food

# Real-life behavioural interventions to stimulate more plant-based and less animal-based diets: A systematic review

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#### Abstract

This review aims to identify which determinants can best be targeted in order to increase plant-based and/or reduce animal-based food consumption in real life settings. Knowledge about underlying determinants contributes to effective interventions, because it gives insights into why an intervention is (not) effective.

Two electronic databases were searched from 2008 until January 16, 2019 for experimental real-life studies aiming at increasing plant-based and/or reducing animal-based food consumption. In three consecutive rounds, articles were screened based on title, abstract and full-text. Three researchers independently coded the articles on a set of inclusion and exclusion criteria. In total 48 articles, which report 51 studies, are included. The Determinants Of Nutrition and Eating (DONE) framework is used to categorize the determinants into four categories: individual, interpersonal, environment and policy.

Four studies promoted simultaneous increase of plant-based food consumption and decrease of animal-based food consumption, all targeting environmental determinants and four studies aimed to reduce animal-based food consumption, of which two targeted individual determinants, one study interpersonal determinants and another study environmental determinants. In total 40 studies aimed to promote plant-based products of which the majority targeted either individual or environmental determinants.

On an aggregated level, targeting environmental or individual determinants in reallife interventions appear to be most promising to stimulate more plant-based and/or lessanimal based diets.

Symposium:Process tracing methods as a tool to investigate unethical behavior

#### Symposium:

Process tracing methods as a tool to investigate unethical behavior

#### Organizer:

Christoph Kogler (Tilburg University; <a href="mailto:c.kogler@uvt.nl">c.kogler@uvt.nl</a>)

### **General Abstract:**

Process tracing methods (e.g., eyetracking, mouselab, fMRI) offer privileged access to the cognitive and affective underpinnings of decision-making and behavior (e.g., Schulte-Mecklenbeck, Kühberger, & Johnson, 2011). In recent years, researchers in social psychology have begun to take advantage of these promising sources, demonstrating the potential of process tracing to improve our understanding of social cognition and behavior, for instance in decisions that entail an ethical component and thus are prone to the influence of social desirability. There are two major advantages to process tracing methods: First, the assessment of underlying processes in social behavior is a complex challenge. Social psychological theories often predict that behavior is motivated by unconscious or intuitive processes, which may not be measurable through direct self-report methods. Individuals often lack introspection into their own underlying motivational processes. Tackling this problem, process measures provide unobtrusive and direct approaches to examine information search and processing, even for intuitive and unconscious decisions. Second, process tracing allows for a comprehensive and rigorous test of theories due to the availability of multiple measures. Recording of multiple dependent measures permits to test for patterns of results instead of isolated effects (i.e., only the final choice). Critically, process tracing methods allow researchers to explicitly test theoretical assumptions about how people seek out and integrate information and to evaluate competing theoretical predictions. The proposed symposium includes four studies that apply thermal imaging, physiological arousal measurement, eyetracking, and mouselab, respectively, to investigate different aspects of cheating in the context of ethical decisions.

Symposium:Process tracing methods as a tool to investigate unethical behavior

Your lies leave me cold: Thermal imaging reveals decreased finger temperatures when observing lies

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People tend to be bad at explicitly detecting lies, rarely deviating from chance-levels in accuracy. However, physiological responses may yield above-chance levels of accuracy in differentiating lies from the truth. Specifically, if facing deception induces threat in observers, physiological responses regulated by the autonomic nervous system may respond even if no explicit detection of deception occurs. Consequently, we hypothesized that vasoconstriction driven by the sympathetic nervous system would reduce blood flow through the skin, leading finger temperatures to drop when confronted with a lie compared to the truth. Participants (N = 96) observed people telling lies or the truth about their social relationships in eight videos, showing four lies and four true stories per participant in random order. Participants' fingertip temperature in the non-dominant hand while viewing these videos was recorded non-invasively using infrared thermal imaging. Results suggested lower fingertip temperatures while viewing videos containing a lie compared to a true story. At the same time, the accuracy of explicit deception judgments remained at chance levels. Conceptually replicating the results of Van't Veer, Gallucci, Stel, and Van Beest (2015), this suggests implicit deception detection can be unveiled in physiological responses. Implications for the use of infrared thermal imaging in decision research are discussed.

Symposium:Process tracing methods as a tool to investigate unethical behavior

## Fooling whom out of his money? Investigating arousal dynamics in the context of betraying a stranger or an institution

Alina Fahrenwaldt (Max Planck Institute for Research on Collective Goods; fahrenwaldt@coll.mpg.de)

Cheating by self-ascribed honest individuals, is subject to scientific debates concerning the proposed underlying cognitive and attentional processes. While self-concept maintenance theory assumes cheating to be a conscious profit-maximizing behavior which creates cognitive dissonance, the bounded ethicality approach holds that it may be the result of motivated, yet unconscious attentional and reasoning mechanisms. Previous research suggests cheating may be easier when harming an institution compared to a person and may depend on interindividual differences in prosocial traits. We present evidence from a pupil dilation and attention study (N = 101) investigating cheating behavior contingent on cheating the research institute compared to another anonymous participant. We find the hypothesized differences in the propensity of cheating depending on the type of claimant and social value orientation. But, analyzing the experienced arousal, we discover very similar arousal patterns for both contexts. The same holds true for the analysis of biased attention. Meaning, we find more attention to the tempting decision option both when cheating a fellow participant as well as the research institute. These first results indicate that the underlying processes of cheating are not context dependent but rather universal.

Symposium:Process tracing methods as a tool to investigate unethical behavior

## Loss framing increases self-serving mistakes (but does not alter attention)

Margarita Leib (University of Amsterdam; M.Leib@uva.nl)

In ambiguous settings, people are tempted to make self-serving mistakes. Here, we assess whether people make more self-serving mistakes to minimize losses compared with maximize gains. Results reveal that participants are twice as likely to make self-serving mistakes to reduce losses compared to increase gains. We further trace participants' eye movements to gain insight into the process underlying self-serving mistakes in losses and gains. We find that tempting, self-serving information does not capture more attention in loss, compared to gain framing. Rather, in loss framing, people are more likely to report the tempting, self-serving information they observed. The results imply that rather than diverting attention away from tempting information, reducing people's motivation to make self-serving mistakes, and framing goals as gains rather than losses are promising ways to decrease the occurrence of self-serving mistakes. In turn, this fosters environments with more accuracy and fewer motivated mistakes.

Symposium:Process tracing methods as a tool to investigate unethical behavior

Delayed audit feedback boosts tax compliance but increases acquisition of information on consequences of evasion

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In experimental research on tax behavior audits usually occur directly after filing taxes, and feedback on the consequences of an audit is given immediately. In reality, audits happen within a much longer period of time. This difference in time lags between filing and audit feedback may play a crucial role with regard to the external validity of experimental results. The present study investigates the effect of delayed audit feedback on tax compliance by varying tax rates, audit probabilities, and fine rates, as these factors are known to have a strong influence on tax compliance. Furthermore, specific attention is paid to the process of information acquisition before making a compliance decision. The results reveal that compliance in delayed feedback conditions was significantly higher than in case of immediate feedback. In addition, lower tax rate, higher audit probability, and higher fine level resulted in higher tax compliance. Analysis of response times showed that participants in the delayed feedback condition took longer to decide whether to comply or evade. With regard to the acquisition of information, delayed feedback resulted in more frequent and longer attention to information on audit probability and fine rate compared to immediate feedback. In combination with perceiving delayed feedback as more unfair as indicated in the post-experimental questionnaires, this pattern of results is interpreted as an indication of aversive uncertainty.

Symposium: Complexities in belief systems, threat, and politics: Moving beyond the easy answers

### Symposium:

Complexities in belief systems, threat, and politics: Moving beyond the easy answers

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#### **General Abstract:**

Political and religious beliefs are at the center of societal conflict and upheaval, including Brexit, the rise of populism, and climate change. They are also at the center of more mundane issues, like taxes, immigration policy, and education funding. Although it might be tempting to identify a simple principle or a key variable for explaining political and religious conflict, this set of talks show the importance of taking into account different types of threats, attitudes, and countries when trying to understand why people hold the beliefs that they hold. In the first talk, van der Bles shows that perception of collective discontent is a necessary predictor of Brexit support, even when compared to traditional predictors, like political ideology. In the second talk, Gootjes shows that societal discontent predicts opposition to and protest against refugees in the Netherlands above and beyond predictors like prejudice towards refugees. In the third talk, Brandt shows that the link between perceived threats and political attitudes depends on the type of threat, the type of attitude, and the country suggesting that there are few simple links between perceived threats and political beliefs. In the fourth talk, Rutjens shows that the predictors of science skepticism in the Netherlands are sometimes similar (e.g., right-wing ideologies) and sometimes different (e.g., spirituality) from those in the United States. Across all of the talks, we find that simple answers about the power of ideology, threat, or religion fall apart when the scope of predictors, outcome variables, or countries is expanded.

Symposium: Complexities in belief systems, threat, and politics: Moving beyond the easy answers

Understanding Brexit: the impact of collective societal discontent on support for radical societal change

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Co-authors: Sander van der Linden, University of Cambridge

A multitude of factors have been proposed as explanations for why the British people voted to leave the European Union in June 2016. Particularly interesting is that Brexit-support cut right through existing party lines and ideologies: both the Conservative and Labour party had "Remainers" and "Brexiters" among their supporters. We argue that a critical missing piece in the psychological puzzle of understanding the Brexit-vote is UK's Zeitgeist of collective discontent, because this collectively shared, general discontent with the state of society motivates support for radical societal change. In other words, that one relevant part of people's political belief system in determining Brexit-support is a socially-shared notion of societal decline (as compared to individual-level beliefs). In four large studies (total N = 4249), British participants completed the short Zeitgeist scale: To what extent does the average person in the UK suffer from crime; financial problems; discrimination; antisocial behaviour; injustice; corruption; and immigration (1 = not at all to 7 = a great deal). Participants' votes during the Brexit-referendum (Studies 1-4) and current support for Brexit (Studies 2-4) were assessed. Across all studies, results showed that Zeitgeist was associated with Brexit voting and support: more collective discontented people were more likely to have voted Leave and to currently strongly support Brexit, even when controlling for age, education level, and political orientation. The present findings show that in addition to individual characteristics and attitudes, people's shared notion that society is doing badly is an important factor in driving radical societal changes.

Symposium: Complexities in belief systems, threat, and politics: Moving beyond the easy

answers

"Society is going down": investigation of the role of societal discontent in responses to the

refugee situation

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Tom Postmes, University of Groningen

Toon Kuppens, University of Groningen

Over the last decades, people increasingly feel that society is heading in the wrong direction, while objective statistics about society indicate otherwise. To these people, current society seems to be performing badly on a whole range of dimensions, such as politics, crime, income differences, and antisocial behaviour. Populist politicians capitalize on this feeling of discontent and seem to gain popularity, and protests in Western countries seem to be mobilized by this discontent towards society. Since 2015, we have seen a rise in the number of public protests against refugees across Europe. In a longitudinal panel study (N = 2601; N = 1090), we investigated the impact of the migration situation that started in 2015 on refugee attitudes among Dutch citizens. Specifically, in explaining refugee policy support, we contrast frequently used predictors of attitudes towards migrants with predictors of societal discontent (e.g. distrust in politics and pessimism, fear and worries about society's future). We find evidence that societal discontent negatively predicts refugee policy support, over and above citizen's attitudes towards refugees. Furthermore, discontent seems an important predictor for protest behaviour against refugees, even when controlling for attitudes towards refugees. We therefore provide evidence that the negative responses from citizens to the European migration situation arose partly from an aversion to refugees, but almost just as much from a negative perception of the current and future state of society.

Symposium: Complexities in belief systems, threat, and politics: Moving beyond the easy answers

## The association between threat and politics depends on the type of threat, the political domain, and the country

Mark J. Brandt, Tilburg University, Felicity M. Turner-Zwinkels, Tilburg University, Beste Karpirinler, Tilburg University, Florian van Leeuwen, Tilburg University, Michael Bender, Tilburg University & Gratia Christian College, Hong Kong, PR China, Yvette van Osch, Tilburg University, Byron Adams, Tilburg University & University of Johannesburg, South Africa

Threat is associated with right-wing political beliefs in social and political psychological theory. However, this work typically collapses across different types of threat and different political beliefs while only using data from a limited subset of Western democracies. We use the World Values Survey (72,836 participants) to test how different types of threat (economic, violence, and surveillance) are associated with different types of political beliefs (social, economic, and political identification) across 42 different countries from six continents. For the entire sample and for each country individually, we estimated belief system networks consisting of the three types of threats and the three types of political beliefs. This isolates the direct effects between the threats and the political beliefs. We found that the association between threat and political beliefs depends on the type of threat, the type of political beliefs, and the country. Economic threats tended to be associated with more left-wing economic beliefs, violence threats tended to be associated with more right-wing beliefs, and surveillance threats tended to be associated with more right-wing economic beliefs and more left-wing social beliefs. Additional analyses explored how 24 country characteristics might help explain variation in the threat-political beliefs association; however, these analyses identified few cross-country characteristics that consistently helped explain the variation. Some evidence tentatively supports the idea that economic threats are associated with left-wing economic beliefs primarily in countries with well-functioning governments. Our findings show that political beliefs and perceptions of threat are linked, but the relationship is nuanced.

Symposium: Complexities in belief systems, threat, and politics: Moving beyond the easy

answers

Spiritual skepticism? Heterogeneous science skepticism in the Netherlands

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Recent work on the ideological antecedents of science skepticism points to its heterogeneous nature. However, most of what we know about the relation between belief systems and science skepticism is based on data collected in the United States. I will present data from two studies aimed at addressing the generalizability of this knowledge, by extending earlier work on the heterogeneity of science skepticism among individuals from a Western-European country (The Netherlands). Results indicate that various key findings hold up: Mirroring North-American patterns, climate change skepticism is primarily associated with political conservatism, and scientific literacy does not contribute to skepticism, except about genetic modification (GM; Study 1 only) and vaccine skepticism (Study 2 only). However, the current data also reveal a crucial difference: Religious belief does not consistently contribute to science skepticism, except for the topic of evolution. Instead, spirituality as a belief system is found to be the most consistent predictor of science skepticism (about vaccination and genetic modification) and low general faith in science which in turn predicts willingness to support science. In addition to these results, two additional contributors to vaccine and GM skepticism are conspiracy thinking (Study 1 only) and concerns about the societal impact of accepting vaccination and GM. Taken together, these findings have important implications for the generalizability of previous work on ideology, belief, and science skepticism.

### **Close relationships**

## Trait Self-control and Relationship Satisfaction among Heterosexual Couples: How Strong Is the Association Really?

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Previous research has demonstrated that self-control is linked to a range of positive romantic relationship processes, suggesting that self-control should be positively and robustly linked to one's own and the partner's relationship satisfaction. However, empirical evidence is limited and mixed. With three datasets of heterosexual couples (S1: N = 195 couples, longitudinal; S2: N = 249 couples, longitudinal; S3: N = 929 couples, cross-sectional), the present pre-registered studies examined: 1) the dyadic effects of self-control on relationship satisfaction both cross-sectionally and longitudinally; 2) whether these effects hold when controlling for relationship commitment and attachment insecurity; and 3) explored the potential moderating role of relationship commitment and attachment insecurity on the association between self-control and relationship satisfaction. To address the first two research questions, actor-partner interdependence models (APIMs) were tested across the three studies. Actor-partner interdependence moderation models (APIMoMs) were tested to answer the third research question. The results indicated 1) a cross-sectional positive actor effect, some but non-consistent support for cross-sectional partner effects, and very little support for longitudinal effects. 2) After controlling for commitment and attachment, all effects of self-control diminished. 3) Both relationship commitment and attachment insecurity moderated some associations between self-control and relationship satisfaction (particularly for men's satisfaction), but without any consistent moderating patterns. Potential explanations for the current results, and implications for theory and practice, are discussed.

#### **Close relationships**

## Financial Decision-Making under Scarcity: The Household Game and Temporal Discounting

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When being poor or having debt, people often experience financial scarcity. Financial scarcity is the subjective experience of lacking needed financial resources. Scarcity has been shown to affect emotions, cognitive abilities, and decision-making. So far, the relatively young area of research has mostly been studied in the field, as it seems challenging to reliably manipulate financial scarcity in laboratory studies. While they are certainly very informative, field studies based on existing differences in wealth or debt levels can be confounded and are not optimal for investigating cause and effect relations. To tackle this, we developed the household game. During the game, participants have to manage the finances of a household-by earning income through labour and paying expenses. By changing the income and expenses ratio, we can manipulate how much money participants have available and thereby induce a scarcity mindset. Over three studies, we show that financial scarcity leads to increased temporal discounting. In Study 1, we test the effectiveness of the paradigm, showing that the household game is successful in inducing a scarcity mindset and financial stress. In Study 2, we show that scarcity changes time preferences, with participants in the scarcity condition having a higher short-term focus (pre-registered). In Study 3, we replicate the effect of scarcity on temporal discounting, and extend it to the discounting of losses (pre-registered). Altogether, these studies make a significant contribution to the literature and methodology of research on financial scarcity.

Close relationships

A Nice Surprise:

Sacrifice expectations and partner appreciation in romantic relationships

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Abstract:

Romantic partners regularly encounter conflicts of interests and sacrifice their self-interest for their partner or the relationship. But is this relationship maintenance behavior always appreciated by the partner receiving the sacrifice? We examined whether expectations of sacrifices (i.e., beliefs that sacrifices are necessary, normal, and expected in relationships) predict people's appreciation for their partner and, ultimately, their relationship satisfaction. Utilizing a daily experience procedure among romantic couples in the Netherlands (N = 253 individuals), we found that when participants perceived a partner's sacrifice, they experienced greater partner appreciation (i.e., gratitude and respect) and, in turn, felt more satisfied with their relationship when their sacrifice expectations were low, rather than high. In contrast, perceiving a partner's sacrifice had no effect on appreciation and relationship satisfaction when the sacrifice recipient held strong sacrifice expectations. These findings illustrate the power that expectations have in influencing the receiver's appreciation of their

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partner's pro-social behavior.

#### **Close relationships**

## Executive Control: When and for Whom Implicit Partner Evaluations Predict Forgiveness in Close Relationships

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Grace Larson (Ruhr University Bochum).

Wilhelm Hofmann (Ruhr University Bochum).

Recent work suggests that implicit partner evaluations are a powerful predictor of relationship success in the long run because they affect daily dyadic behaviors that are essential to relationship maintenance. Yet, there is very little evidence showing whether and how implicit partner evaluations may extend their influences to the overt relationship behaviors and decision-making processes that are critical to the fate of one's relationship. Drawing upon dual-process theories, we predicted that, when people have limited opportunities to engage in effortful deliberate processing (i.e., either state or trait executive control), their implicit partner evaluations would influence their decision to forgive their partner; a crucial relationship-maintenance behavior. Results revealed that when temporarily taxing people's state executive control with an experimental manipulation (Study 1, N = 131), or for people with lower trait executive control as reflected by their Stroop performance (Study 2, N = 260), more positive implicit partner evaluations were associated with greater willingness to forgive a partner's transgression (Study 1) and with more real-life forgiving behaviors toward a partner's offense in an 8-day diary. Alternative explanations were tested and ruled out as our findings held controlling for various individual dispositions, such as participants' aggressiveness, self-reported trait self-control, agreeableness, and explicit evaluations of their relationship partner. Taken together, our findings highlight the importance of implicit partner evaluations under specific yet increasingly common situations (i.e., when people have limited opportunities to engage in deliberative processes) for promoting repair behaviors that are critical to long-term relationship success.

#### Immigration, prejudice and racism

# Disgust sensitivity and opposition to immigration: Does contact avoidance or resistance to foreign norms explain the relationship?

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Past research suggests that pathogen-avoidance motives (e.g., disgust sensitivity) relate to greater opposition to immigration. Two accounts have been proposed to explain this relationship, one of which emphasizes proximally avoiding outgroups, and the other of which emphasizes adherence to traditional norms. According to the former, immigrants are perceived as being more infectious because they carry novel pathogens due to their foreign ecological origins. According to the latter, immigrants' foreign norms are perceived as posing a pathogen threat. This study aimed to disentangle these accounts. Participants (N = 975) were randomly assigned to read a description of an immigrant who had high or low contact with locals and high or low assimilation to local norms. The effect of disgust sensitivity on sentiments toward the immigrant (and immigrants like him) was compared across conditions. Results supported the traditional norms account: disgust sensitivity related to anti-immigrant sentiments when the immigrant was described as not assimilating to local norms, but not when he was described as assimilating. Contrary to the outgroup avoidance account, the relationship between disgust sensitivity and anti-immigrant sentiments did not vary across the high-contact and low-contact conditions. Results suggest that resistance to foreign norms, rather than avoidance of novel pathogens, better explains the relationship between pathogen avoidance and outgroup prejudice.

*Keywords*: the behavioral immune system, disgust sensitivity, immigration, outgroup avoidance

#### Immigration, prejudice and racism

When cultures clash: How perceived cultural distance in values triggers attitudes about migrants in the Netherlands

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Migration elicits mixed reactions. Negative responses towards migrants seem to be especially the case when migrants are perceived as culturally different from the host society. However, we know very little about which specific cultural differences may evoke negative attitudes. This research investigated when and why perceived cultural distance (PCD) is associated with negative migrant attitudes by focussing on cultural values. We expected that PCD in social values (relationships and society) affect attitudes towards migrants more than personal values (individual needs and gains). In Study 1, we investigated the impact of PCD in values towards three migrant groups (Moroccan, Syrian, Polish) from the host-society's perspective among Dutch students (N=200). We measured PCD as the perceived endorsement of values in host-society minus the perceived endorsement by the migrant group. When participants perceived migrants to endorse social values less than the Dutch host-society, they held more negative attitudes towards migrants. In Study 2, we replicated and extended this finding with a representative sample of Dutch citizens (N=668). PCD in social values was associated with more negative migrant attitudes, less tolerance towards migrants, and less support of policies that improve migrants' positions in society. Moreover, this relationship was mediated by group-based threat. This applied to all migrant groups. In comparison, the effect of PCD in personal values was weaker. We discuss when and why PCD about personal values might be tolerated whereas PCD in social values may trigger negative attitudes towards migrants.

#### Immigration, prejudice and racism

#### **Moralization about Zwarte Piet in The Netherlands**

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Individual presentation

Attitude moralization (i.e., when an attitude becomes part of one's core values) can be a powerful driver of individual and societal change, yet we know little about how this occurs psychologically. In the context of the polarized Zwarte Piet debate in The Netherlands, we therefore examined whether and how extreme outgroup actions -perceived as involving dyadic harm – can serve as external triggers for attitude moralization. Specifically, we experimentally tested whether exposure to an extreme (versus moderate) outgroup action increases attitude moralization because of increased dyadic harm perceptions (H1) and via increased emotional responses (H2). Results were in line with both expectations: among two different samples of Dutch participants (total N = 328), we found that this manipulation increased attitude moralization about the Zwarte Piet issue, via increased moral emotion (i.e., anger, disgust, and contempt). These findings thus imply that attitude moralization in the context of polarized debates can be triggered by situational group actions (and how these are perceived). Furthermore, they suggest that individuals' conceptions of what is fundamentally right or wrong can be influenced and shaped by perceptual and emotional responses to these situational triggers. We link these novel insights with the existing moralization literature and discuss future steps towards advancing understanding of the link between societal polarization and attitude moralization.

#### Immigration, prejudice and racism

## Witnessing, and Not Confronting Racism Amplifies Non-Confronters' Prejudicial Attitudes

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While most people believe they would speak up against prejudice and discrimination, they generally fail to do so. We identify a harmful ramification of such inaction through examining its impact on bystanders' own prejudicial attitudes. Across three experiments (N = 597) conducted in two countries, participants witnessed prejudice and discrimination against an outgroup (Black and Muslim in US, Jewish in Hungary) and had an opportunity to confront it. Drawing on knowledge about people's tendency for cognitive dissonance reduction and selfjustification, we predicted and found that those who did not confront subsequently endorsed more negative intergroup attitudes (compared to their attitudes before the incident), possibly to justify and reconcile with their inaction. Non-confronters' subsequent attitudes were also more negative than of those who witnessed the same prejudice but had no opportunity to confront, or those who did not confront other, non-intergroup kind of prejudice. We demonstrate how failing to speak up leads to perpetuation and intensification of prejudice. In follow-up studies, we devised an intervention that can potentially mitigate this downstream harmful effect. Drawing on literature on the selection of dissonance reduction strategies, we examined ways to deter non-confronters from employing the attitude change strategy, i.e. outgroup derogation, as means of reconciling with their dissonant behavior, and instead motivate them for rectifying behavior, i.e., compensating the outgroup by helping them.

#### **Emotions**

## Moral Emotions and Aggressive Tactics in Third Party Punishment: The Effect of Welfare Tradeoff Ratio

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The existence and function of third-party punishment (TPP) has been considered mysterious. Researchers have provided different hypotheses of the function of TPP – namely, group norms, prosociality signaling, and deterrence hypotheses. However, these hypotheses have largely been tested using economic-based anonymous TPP games, which, while well-controlled, are abstract and have limited ecological validity. The current study aims to test these hypotheses using vignettes that describe more ecologically valid situations. We manipulated second-party identities in scenarios, and assessed emotional responses and motivations to aggress. Results revealed that: (1) Second-party interpersonal value (measured via a welfare trade-off task) positively relates to aggression (though more direct than indirect aggression); (2) Second-party identities affect moral emotions, with higher interpersonal value leading to stronger endorsements on anger and disgust, especially on anger; (3) Anger endorsement relates positively to both direct and indirect aggressive motives, whereas disgust relates only to indirect aggressive motives. These results were most consistent with the deterrence hypothesis, which suggests that TPP functions to deter future victimization of oneself and valued others.

#### **Emotions**

## Regret and Disappointment are Differentially Associated with Norm Compliant and Norm Deviant Failures

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Social norms provide benchmarks to use when we compare actual outcomes with what might have, could have or should have been. We investigated the emotional consequences of negative financial outcomes after norm deviant and norm compliant behaviors. Because disappointment is an emotional response to failed expectancies and norms can strengthen such expectancies, we expected disappointment to be higher when norm compliant investment behavior resulted in a loss. On the other hand, because regret is an emotional response to a comparison between actual and counterfactual outcomes and norms are a salient source of such counterfactuals, we expected regret to be higher when norm deviant investment behavior resulted in a loss. Participants in all three pre-registered experiments ( $N_1 = 401$ ,  $N_2 = 1579$ ,  $N_3 = 347$ ) read a vignette about a financial decision involving either a norm compliant or norm deviant investment the participants themselves or some other person engage(s) in. Then, they rated how much regret and disappointment they expected the person in the vignette would feel. Consistent with the hypotheses, we found significant interaction effects in all experiments, indicating that norm compliance was associated with more disappointment and norm deviance was associated with more regret. The results suggest that norm compliant and deviant failures engender different emotional reactions even when the consequences are the same.

#### **Emotions**

## Communicating anger or disgust in moral political rhetoric: Does it help or hurt galvanizing political support?

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Dr. Martijn van Zomeren, University of Groningen

Dr. Kai Epstude, University of Groningen

Are voters indeed as easily swayed by emotions as is implied by the popular notion of living in a "post-truth" political world? We investigated whether and how the communication of anger and disgust in moral political messages strengthens political support for the communicator. In three experimental questionnaire studies, we manipulated a written message of a Dutch (Study 1a, N = 94) or English (Study 1b/2, N = 159/306, respectively) student union representative speaking out against rising tuition fees so that it either conveyed anger, disgust, or no emotional involvement with the issue. In all studies, we found support for an emotions-as-social-information account over an emotion contagion account, as participants inferred more negative goal intentions (e.g., smearing and wanting radical change) from both emotional messages and perceived those messages as less appropriate, but did not experience the same distinct emotion as the communicator. Study 2 found a negative effect of disgust communication on political support, which was positively correlated to the message being perceived as less appropriate, and the inference of a negative smearing goal. Taken together, these results indicate that audiences do not blindly follow emotions in moral political speech, but use them to infer meaning which can guide their political decision-making processes.

#### **Emotions**

# Is Hate the Same as Extreme Dislike? Differences across Abstract, Interpersonal and Intergroup Targets

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Although many psychological theories about hate have been emerging since the beginning of the 20th century, its nature and operationalization are yet unclear. Hate has been compared with discrete emotions like anger, disgust or contempt, and is often considered an extreme form of dislike. Empirical evidence for these distinctions is still scarce, however. The present research aims to explore how people conceptualize hate across different targets, and provides an empirical analysis of how feelings of hate differ from extreme feelings of dislike. In two preregistered studies, using an exploratory and a confirmatory within-subjects design, we asked adult participants in the U.S. ( $N_{total}$  = 621) to describe their abstract, interpersonal, and intergroup hate and dislike targets while measuring their corresponding intensity, duration, threat perceptions, and associated action tendencies towards them. Across studies, results indicate that as compared with strong dislike, hate is experienced as a more intense and enduring feeling; predicts higher threat perceptions; and is associated with more approach and less avoidance behaviors towards the targets. Furthermore, results reveal that that people experience interpersonal hate as more intense than intergroup hate. These findings provide novel empirical evidence about the distinction between hate versus strong dislike, and provides new insights about hate's unique properties. In closing, we discuss whether hate is more aptly conceived of as a sentiment rather than a discrete emotion, and the functional value of hate in interpersonal relationships.

Symposium: Diversity in (social) contextual influence of smells: From evolution to learning to understand human olfaction

### Symposium:

Diversity in (social) contextual influence of smells: From evolution to learning to understand human olfaction

#### **General Abstract:**

Compared with vision and hearing, the sense of smell has a long history of being underestimated, with generations of philosophers and (non-empirical) researchers calling olfaction coarse and inferior. The disregard for the sense of smell is not a biological, but a cultural phenomenon: recent studies suggest hunter-gatherers can name smells as easy as colors. The environment we live in, including cultural pressures, shapes our thinking about smells, yet there may be innate (evolutionary) forces that drive certain aspects of human olfaction. Humans are "generalists" that roam different environments, encounter different threats, and have access to a high (and dynamic) variety of food sources, such that our survival chances have arguably increased by putting a somewhat larger emphasis on learning what odorants, in what contexts, signify, for example, nutrition or danger. This may be part of the (functional) reason human olfaction shown signs of remarkable plasticity. During this symposium, different perspectives on the psychology of human olfaction, with regards to evolution, emotion, and cognition, are given.

Symposium: Diversity in (social) contextual influence of smells: From evolution to learning to understand human olfaction

## A non-linear dose-response to the smell of fear: Behavioral, physiological, and neural evidence

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Millennia-old beliefs of humans being "tiny smellers" have long stalled scientific progress to debunk this myth. The past decade saw an emergence of impactful reviews citing empirical studies highlighting the excellent smell skills humans share with other animals, including social communication. The information conveyed by human body odors is remarkably multifarious, ranging from a person's gender, age, and health, to transient emotions crucial to survival, including fear. Meta-analyses of the chemosignaling literature have reliably demonstrated that humans emulate conspecifics' fear after smelling fear odor. Yet, as human olfactory communication research has exclusively treated emotions as categories (e.g., fear vs. nonfear), a hitherto unresolved challenge is whether emotion quantity can be communicated chemically. Humans are no exception to organisms that critically benefit from maintaining a stable percept across varying stimulus intensities. To test this, we first collected sweat from 36 fearful (vs. calm) senders and used multivariate pattern analysis to categorize participants' experiential and physiological responses into low, medium, and high fear. Then, all isointense, iso-pleasant, indistinguishable odors were presented to 31 receivers using a custombuilt olfactometer in an fMRI scanner, while they rated faces morphed between fear and disgust. This double-blind study brings behavioral evidence for an implicit categorical shift in perceiving more fear in faces (step-wise dose-response function), which suggests the concentration-invariant decoding fear odor quality. Moreover, concentration-dependent decoding was suggested by curvilinear responses on the physiological (odor intake) and neural (amygdala) level.

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### Odor language and memory in wine experts

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Smell perception is relatively more susceptible for contextual influences. For example, when butyric acid is presented labeled as 'parmesan cheese', people will rate it as much more pleasant than when labeled 'vomit'. Likewise, when white wine is dyed red, people, even experts, tend to give smell and taste descriptions more appropriate for red wine ('cherries', 'red fruit') than when the wine is tasted undyed. This high dependence on context is reflected in memory for smells too: people appear to primarily remember smells by their label. Experts, after having learned a trade and become profoundly experienced in it, remember stimuli from their domain of expertise with much higher accuracy than novices. This also holds for olfaction experts such as wine experts, but the breadth of this finding is unknown: can wine experts remember any smell, or is it domain specific for wines? At the same time, wine experts were found to name wine smells better than novices. The studies presented in this talk addressed three questions: whether wine experts have a memory advantage for wines, whether this better memory is domain specific or more general for other smells, and whether their memory advantage could be explained by their ability to name wines. The findings suggest that although smell perception is highly context dependent, experts' odor memory is not linguistically mediated. In addition, the ability to name wines and the ability to memorize wines appear to be two different aspects of wine expertise.

Symposium: Diversity in (social) contextual influence of smells: From evolution to learning to understand human olfaction

#### Is there a role for olfaction in embodiment?

Laura Speed & Asifa Majid<sup>2</sup>

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In recent years, a substantial amount of research has supported the idea that cognition is embodied. That is, the way that we think and talk about the world is grounded in our action and perception systems. However, this approach to understanding cognitive processes has focused primarily on dominant perceptual modalities like vision and audition. Little research has explored whether so-called "lower senses", such as olfaction, play a role in embodiment. In this talk I will present experimental work exploring the embodiment of odor language words describing objects with strong olfactory associations (e.g., garlic, eucalyptus). Participants held an odor-related word (e.g., garlic) in mind while they smelled an odor, then recalled the word. Later, odor recognition was tested. In a control experiment, a different set of participants completed the experiment with sound-related words (e.g., bee, buzzer) and sounds. We found that sound-related words affected memory for sounds, suggesting sound language is grounded in auditory perception. In comparison, no effect of odor-related words on odor recognition was found. This suggests that, unlike sound-related language, odorrelated language is not embodied. In other words, the results suggest that language does not activate olfactory representations. More generally, the results imply that olfaction has a negligible role in high-level processes, such a language.

Symposium: Diversity in (social) contextual influence of smells: From evolution to learning to understand human olfaction

### Illuminating disgust sensitivity via olfactory threshold testing

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People vary in their disgust sensitivity (i.e., the intensity of disgust they feel toward pathogen cues), but the source of this variation remains mysterious. Based on information processing models of disgust, the current study aimed to adjudicate between two competing proposals: (1) that this variation stems from differences in abilities to detect the sensory stimuli that give rise to disgust, versus (2) that this variation arises from other processes post detection. These proposals were tested across two studies (N's = 119 and 160), both of which tested how disgust sensitivity relates to valence and intensity ratings of 10 odors (five positive and five negative), and the second of which tested how disgust sensitivity relates to olfactory thresholds for butyric acid (vomit odor) and phenethyl alcohol (rose odor). In both studies, higher levels of disgust sensitivity corresponded with more negative ratings of the five negative odors, but not the five positive odors. However, disgust sensitivity was unrelated to odor thresholds, both for butyric acid and phenethyl alcohol, and it was also not related to ratings of suprathreshold odor intensities. These results suggest that disgust sensitivity does not straightforwardly arise from variation in ability to detect cues to pathogens – at least not olfactory ones. Instead, this variation results from intermediate computational processes that integrate sensory information with other goal-relevant information (e.g., provided by the social context).

Symposium: The implications of (not) having free choice

#### Symposium:

## The implications of (not) having free choice

Organizers: Daniela Becker (Leibniz-Institut für Wissensmedien, Tübingen) and Erik Bijleveld (Radboud University)

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#### **General Abstract**

Freedom of choice is often seen as a key aspect of human dignity. In line with this idea, western society is organized in such a way that it safeguards freedom of choice where possible (e.g., in medical practice). Moreover, encouraged by the well-established positive effects of having the opportunity and autonomy to make one's own choices (e.g., on motivation, on well-being), psychologists often design interventions (e.g., at the workplace, at schools) that aim to increase people's freedom of choice (e.g., by giving them control over the order of their work tasks). Nevertheless, in reality, the humanist ideal of having freedom of choice is not always met. In fact, as is clear from social psychology, people's choices are often affected by others' preferences, goals, and expectations. Against the background of this tension between deeply appreciating vs. not always having freedom of choice, this symposium brings together several lines of research that all broadly examine the implications of (not) having free choice. The first two talks will focus on consequences of freedom of choice. Daniela Becker will show that the experience of decisional conflict—a common characteristic of free choices—has a profound effect on memory processes. Next, Tom Damen will show that people's experience of agency and control increases their tendency to make risky choices. The last two talks examine potential boundary conditions of freedom of choice. In particular, Iris Verpaalen will explore when other people's advice causes reactance, rather than compliance. And finally, Erik Bijleveld will present metaanalytic evidence that that reward-related information may distract attention away from ongoing tasks, constraining people's capacity to deploy focused attention at will. Together, this symposium showcases a diverse set of perspectives on free choice, emphasizing constraints on, and consequences of, freedom of choice.

Symposium: The implications of (not) having free choice

The effect of decisional conflict on memory

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People encounter decisional conflicts every day. In most cases, those conflicts do not have a single correct solution. Instead, all available options might be attractive and thus 'correct' in their own way. For example, when deciding whether to stay in the office or joining my friends in the beer garden, I might feel conflicted because both options are attractive – for different though valid reasons (otherwise I would not feel conflicted). Previous research in self-control and general decision-making has shown that when people make such conflicted choices, they tend to feel less confident and more regretful afterwards, which suggests that people remain occupied with the non-chosen alternative. The goal of the present studies was to gain direct evidence for the hypothesis that decisional conflict enhances the salience of the non-chosen alternative. To do this, we tested the effects of decisional conflict on memory. In two studies we let participants make a series of (motivationally neutral) choices that could either involve a decisional conflict or not. We also manipulated whether this conflict could be clearly solved or not. Afterwards, participants completed a surprise recall test in which they had to rate their memory of all choice alternatives (and new items). Results showed that people generally remembered the chosen alternatives better than the non-chosen alternatives. Crucially, this difference was significantly reduced for choices that entailed a conflict (vs. did not entail a conflict). Our findings, therefore, show that when solving a decisional conflict, the non-chosen alternative does indeed remain active in memory.

## Symposium: The implications of (not) having free choice

## Sense of agency as a predictor of risk-taking

Tom Damen<sup>1</sup>

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Previous research suggests that people tend to underestimate risks that are under their control. It is however unclear which processes underlie the control-risk relation. The present research investigated the feeling of causal control known as agency as a predictor of risk-perception and risk-taking. In two studies, participants performed a risk-taking task in which their actions either caused immediate or delayed outcomes — a validated manipulation of agency. Results show that when outcomes were shown immediately rather than delayed, and respectively, when agency was high rather than low, participants reported a higher ability to control risks (Study 1). Furthermore, they were also more inclined to take risks (Study 2). The present research, the first to apply principles that emerged from fundamental research on agency into the societally relevant domain of risk-related perception and behavior, therefore showed a clear relation between agency and risk.

Symposium: The implications of (not) having free choice

What keeps people from following advice? A new approach to investigating reactance

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People value their autonomy. Consequently, when people feel pressure to change their decisions, they experience freedom threat. The resulting reactance motivates people to protect their freedom by resisting the influence and continuing their old behavior. Behavior change interventions thus require an understanding of when and how freedom threat results in resistance. In the current study, we aimed to improve research to this process in two ways. Firstly, previous conclusions are mostly based on between-subject designs or vignette studies. To address the shortcomings of these practices, we developed a novel paradigm. It improves efficiency and validity of reactance research by measuring repeated decisions with real outcomes in an immersive virtual reality business setting, without using deception. Secondly, we investigated whether reactance is similar to active responses to acute, physical threats, indicated by increased physiological arousal.

In this pre-registered exploratory experiment, 40 participants made repeated monetary investments. Freedom threat was manipulated within-subject by multiple virtual agents who gave advice in low-controlling or high-controlling language (e.g. "Perhaps you can choose X" vs. "I insist you choose X"). Participants could then confirm their initial preference or choose the other, advised investment. Furthermore, we measured heartrate, skin-conductance, and subjective freedom threat. We found that high-controlling language increased freedom threat and decreased compliance with the advice. Resistant behavior was also related to a faster heartrate. Although the findings confirm that directive advice can be countereffective, this new approach to reactance also suggests a parallel with responses to physical threat and more nuance to reactance theory.

### Symposium: The implications of (not) having free choice

Distracted by rewards: A meta-analysis

Dorottya Rusz<sup>1</sup>, Mike Le Pelley<sup>2</sup>, Leon Mait<sup>1</sup>, Michiel Kompier<sup>1</sup>, & Erik Bijleveld<sup>1\*</sup>

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People have a strong tendency to attend to reward cues, even if these cues are irrelevant to their current goal or their current task. When reward cues are goal-irrelevant, their presence may impair cognitive performance. In this meta-analysis, we quantitatively examined the rapidly growing literature on the impact of reward-related distractors on cognitive performance. We included 91 studies (N = 2,362) that used different cognitive paradigms (e.g., visual search, conflict processing) and reward-related stimuli (e.g., money, attractive food). Overall, results showed that reward-related distractors consistently impaired cognitive performance across different tasks and stimuli – with a small effect size (Standardized Mean Change = .347). We further showed that this reward-driven distraction effect was robust across different reward-learning mechanisms, contexts, and methodological choices, and that this effect exists independently of explicit task instructions to ignore distractors. Additionally, we showed meta-analytic evidence that reward-related distractors influence cognitive processes in a rapid, involuntary fashion. Funnel plot and pcurve analyses revealed no evidence for publication bias and researcher degrees of freedom; in other words, the literature is in good health. The findings of this meta-analysis strengthen recent theoretical developments that cognitive processes can be modulated by rewards, independently of current goals and physical salience. As we found that reward-driven distraction is a robust phenomenon, this phenomenon may be able to explain distractions that happen in real-life settings.

#### Thursday 16.15 - 18.15

#### **Poster Session**

#### Poster 1

Sit Happens: Exploring the Dynamics of Sitting and Standing at Work.

Pam ten Broeke, Erik Bijleveld, Debby Beckers, Sabine Geurts, Anna Lichtwark-Aschoff, Merlijn Olthof (Behavioural Science Institute, Radboud University)

Dick Thijssen (Radboud UMC)

Nicola Hopkins, Sophie Carter, Lee Graves, Abby Morris, David Gavin, Madeline Cochrane (Liverpool John Moores University)

Sitting for extended periods of time, which people often do at work, can lead to serious physical and mental health problems. Although research into sitting behavior has provided crucial insights into the prevalence and physiology of sitting behavior, an essential question still remains: What drives people's sitting behavior? To approach this question, we propose a new conceptualization of sitting behavior as a continuous chain of individual stand-up and sit-down decisions, and we used time-to-event analysis as a statistical technique to analyze these decisions. We used our proposed conceptualization on objectively measured sitting behavior data during worktime of 84 employees from various worksites in the United Kingdom. Specifically, we explored the timing of employee's stand-up and sit-down decisions, and the role of mental fatigue, physical fatigue, and individual differences in physical fitness in steering these decisions. Our analyses revealed that (1) on average, participants were quicker to sit down when standing than to stand up when sitting, (2) participants were quicker to switch postures later on the workday than early on the workday, (3) when participants were more active in the previous hours, they were quicker to stand up when sitting and slower to sit down when standing, and (4) individual differences in physical fitness were not related to the likelihood of standing up and sitting down. Altogether, these results suggest that conceptualizing and analyzing sitting behavior on the level of continuous stand-up and sit-down decisions could provide valuable insights what drives people's sitting patterns.

#### **Gossip and Reputation in Everyday Life**

Terence D. Dores Cruz<sup>a</sup>, Simon Columbus<sup>a</sup>, Isabel Thielmann<sup>b</sup>, Catherine Molho<sup>a</sup>, Junhui Wu<sup>c</sup>,

Francesca Righetti<sup>a</sup>, Reinout E. De Vries<sup>a</sup>, Antonis Koutsoumpis<sup>a</sup>, Paul A. M. Van Lange<sup>a</sup>,

Bianca Beersma<sup>a</sup>, & Daniel Balliet<sup>a</sup>

<sup>a</sup> Vrije Universiteit Amsterdam <sup>b</sup> Universität Koblenz Landau <sup>c</sup> Beijing Normal University

Gossip – a sender communicating to a receiver about an absent target – is hypothesized to impact reputation formation, partner selection, and cooperation. Lab experiments have found that people communicate about others' cooperativeness via gossip and that they use such information to condition their own cooperation. Here, we move beyond the lab and test several predictions from a theory of indirect reciprocity about the content of gossip in daily life and its use in updating the reputations of others in a social network. In a community sample (N = 309), we used intensive experience sampling techniques for 10 days to randomly sample daily events (k = 5,154) in which people either sent or received gossip. We found that senders very often gossip about multiple dimension closely linked to targets' cooperativeness (e.g., trustworthiness, warmth, and norm violations), and that senders gossiped in a way that minimizes the possibility of retaliation from the target (e.g., gossiping to highly valued partners, who share a less valued relationship with the target). When considering received gossip, we found that receivers overwhelmingly believed gossip to be true and that receivers used gossip to update the cooperative reputation of others. In turn, a positive (versus negative) shift in a gossip targets' reputation related to higher (lower) intentions to help (avoid) them in future interactions. Thus, gossip is used in daily life to efficiently impose reputational costs and benefits, and people update reputations based on this gossip in a way that influences partner selection and indirect reciprocity.

## Man or woman? Or something else? A dual-identification approach to gender and consequences for well-being and inclusion

Miriam H.-Harnisch<sup>1</sup>, Félice van Nunspeet<sup>1</sup>, Naomi Ellemers<sup>1</sup>

<sup>1</sup> Social, Health and Organisational Psychology, Utrecht University

Recent societal initiatives (e.g. gender-neutral clothing, toilets and greetings) highlight the ongoing shift of gender away from binary categories: "man" and "woman". However, it is unclear whether the general population's identifications fit a binary model of gender or not, and how non-binary gender identification affects social well-being. We ran a study using a dual-identification approach, whereby we asked all participants both how much they identify with men as well as with women. Replicating our previous findings, a cluster analysis revealed that participants could best be grouped into four categories: a) high women-low men identifiers, b) high women-high men, c) low women-low men and d) low women-high men identifiers. A non-binary approach is thus more accurate for describing how people identify regarding their social gender category. We also asked participants about their feelings of well-being (life satisfaction, self-esteem), and their feelings of inclusion (authenticity, belongingness) in society. Our new findings showed that people who best fit into a more non-conforming identification cluster (categories b and c) reported significantly lower feelings of inclusion. Additionally, individuals with generally low gender identity (category c) reported significantly lower levels of well-being. This suggests that changes in the gender narrative are justified in that they address a real problem that is affecting a significant proportion of the general population. In the future, we will therefore investigate whether the current gender-neutral initiatives are helping with the problem and what we can do to improve them, or what new interventions could be created.

## Cooperation in small task groups: The role of sub-group identities and positive network ties

Leonie Christina Schmidt, Andreas Flache, Russell Spears

#### University of Groningen

Previous research has emphasized the role of superordinate identities in increasing levels of cooperation. However, the presence of sub-group identities (e.g. people of different nationality) has the potential to undermine superordinate identities and lead to a decline in cooperation between members of different sub-groups. In this study, we aim to contribute to the understanding of cooperation in small task groups and how it can be maintained when sub-group identities might undermine cooperation across subgroup boundaries. Drawing from research on positive social network ties, we propose that positive ties that cross subgroup boundaries can strengthen cooperation at the task group level. More precisely, we propose that cross-cutting ties that traverse sub-group boundaries can promote cooperation in a small task group, including between members of different subgroups, that belong to the same superordinate group category.

We conducted an experimental study to test our predictions using an adapted version of a public goods game where participants chose to either foster their private interest, the common interests of their sub-group, or the overarching interest of the task group. Before the second round, participants in groups of 4 were randomly assigned to one of three experimental conditions where we manipulated positive network relations (no ties, cross-sub-group ties, within-sub-group ties). Findings and implications will be discussed.

## Instability of self-knowledge and self-esteem, and uncertainty about how one is evaluated in the face of prejudice

Iris Meinderts, Colette van Laar, Jenny Veldman, KU Leuven

Members from stigmatized groups continue to be underrepresented in various fields (e.g., women in STEM fields, men in health care, low SES people in academia). The present project integrates research on stigma and social identity with work on self-regulation to understand the underlying processes that lead to negative work-related outcomes for stigmatized groups. A proposal of the project will be presented, including proposed studies on how being faced with stereotyping can make people uncertain about how they are evaluated in specific situations, which can lead to fluctuations in their self-knowledge and self-esteem, and ultimately a more unstable self-concept. Key in the project is a consideration of individuals not as passive recipients of negative attitudes, stereotypes, and behaviors, but as active agents pursuing multiple goals and using various strategies to maintain well-being, motivation and performance, with associated costs and benefits.

Determinants of incongruity perception: 3 pre-registered studies in product context

Xin Gao, Arnout R.H. Fischer, Ilona E. de Hooge

Wageningen University and Research, Marketing and Consumer Behavior

Various types of incongruity are perceived in daily life. Persons, situations or products incongruent with stereotypes might trigger curiosity. However, innovative products which consumers perceive incongruent and fail to categorize might be rejected. This project investigates possible determinants of perceived incongruity in product context.

Three studies (over 400 subjects) used the same 2(repurpose/non-repurpose)\*2 (natural/non-natural) within-subject design. Subjects assessed congruity of stimuli (products with materials information). Bags and shoes were used as products, combined with existing materials (e.g., mushroom is natural and repurpose because it is known as food but also used as a fabric). Study3 tested functionality (sturdiness of the material) as mediator. Hypotheses, sample size, and analyses were pre-registered before data collection (https://osf.io/w7c94/).

Participants perceived repurposed materials less congruent than non-repurposed materials. Three studies consistently showed an interaction of natural and repurpose on congruity: repurposed, natural materials scored the lowest, but no difference between natural and non-natural in the non-repurpose condition. The interaction effect was fully mediated by perceived sturdiness of the materials.

The results indicated that incongruity perception is due to atypical stimuli (usual products combined with unusual materials), and this atypicality can be generated through tweaking repurpose and natural dimensions of the materials. We found that in the product context, the causal relation between the perception and stimuli might be due to dissatisfied functionality (e.g., mushroom is not sturdy for bags). This underlying mechanism can be tested in other product types with different functionalities, or broadly, in social cognition domain (e.g., categorization or impression formation).

## Effects of the Generic Masculine Revisited: A Close Replication of Stahlberg, Sczesny and Braun, 2001

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In languages such as German, French or Spanish, plural forms of job occupations and societal roles are often in a generic-masculine (GM) form. That is, instead of employing gender-fair forms, people often use the male plural form implying men and women likewise. Proponents of gender-fair language and language psychology argue that the GM form excludes women from everyday language and might even entail the cognitive effect that listeners and readers will more likely think of men only, mentally reinforcing gender inequality. Several studies have demonstrated this and related cognitive effects in the past, but hardly any replication studies of these effects exist. We picked one prominent German study in the field by Stahlberg, Sczesny and Braun (2001, Experiment 2), which yielded evidence that people indeed think of more male exemplars when they are asked to "name three politicians", "athletes", "tv hosts", and "singers" in the GM form (e.g., male politician or "Politiker"), compared to two alternative gender-fair forms (naming-both form: female and male politician or "Politikerinnen und Politiker"; internal-I form: "PolitikerInnen"). Beside our high-powered (N = 280), close replication in accordance with the Replication Recipe (Brandt et al., 2014), we extended the original work and included relevant control variables such as participants' perceived base rate of women in these occupations and their inclination to use gender-fair language. Using mixed models, we found some evidence for the cognitive effect. Moreover, control variables provided limited information only. Results will be critically discussed in the light of the Replication Crisis.

## Newcomers, Migrants, Surgeons: Making It in the Amsterdam Surgeons' Guild of the Eighteenth Century

Piet Groot, Naomi Ellemers and Maarten Prak
Utrecht University, PhD student of Social, Health, and Organisational Psychology, Naomi

As part of an interdisciplinary thesis on newcomer integration in the Dutch labour market, I performed an historical case study of newcomers to the Amsterdam Surgeons' Guild of the eighteenth century. The central questions were whether the Surgeons' Guild was open to members with a migration background, and whether (and how) a migration background influenced a surgeon's chances of career making once he had gained entry to the Amsterdam Surgeons' Guild. Method: Archival study using material left behind by the Amsterdam Surgeons' Guild. Qualitative data revealing the Guild's official stance towards newcomers was obtained from printed guild regulations. Quantitative data containing information about surgeon birth origin was obtained from written enrolment lists of apprentices, journeymen, and master surgeons. Results: Like many current-day organisations, the Amsterdam Surgeons' Guild recruited its members from the ranks of locally born citizens as well as migrants. The official stance of the Guild towards migrants was welcoming, and (perhaps as a result) many migrants joined the Guild. However, when it came to making a further career within the Guild, migrants who lacked Amsterdam-based work experience were disadvantaged. These results point to the importance of local experience for migrants' career perspectives, and form the basis for further psychological research.

### Towards a Cultural Psychology of Loneliness: The Culture-Loneliness Framework

Luzia C. Heu, Martijn van Zomeren & Nina Hansen

Department of Social Psychology, University of Groningen

Loneliness is a common experience with major negative consequences for well-being. Although much research has examined protective and risk factors for loneliness, we know little about its cultural underpinnings. The few studies that exist in a cultural psychology of loneliness seem paradoxical, suggesting that loneliness is higher in countries where tighter and more demanding (i.e., more restrictive) cultural norms about social relationships decrease the risk of social isolation, while loneliness is lower among individuals who hold more restrictive norms or perceive such norms among others around them. We move beyond previous research by developing the culture-loneliness framework, suggesting that both more and less restrictive norms about social relationships can put at risk for loneliness, but through different types of isolation. More restrictive (i.e., more, tighter, or more demanding) norms about social relationships may protect from the risk of physical isolation (i.e., a lack of social interaction or relationships), but put at risk for emotional and perceived isolation (i.e., a lack of individually satisfying relationships or relationships that do not fulfil cultural ideals). We evaluate this framework through reviewing primary and secondary data at both the individual and the cultural level.

"I'm not sure, it is.... complicated.":

The experience and sources of ambivalence amidst contentious societal debate.

Gonneke Ton, Martijn van Zomeren and Katherine Stroebe

Department of Social Psychology; University of Groningen

Social change is negotiated in part through contentious societal debate, such as debates about immigration, gun control, and abortion. Social-psychological research in those contexts often focus on the extremes on either side of the debate, but we focus on the group of people in society who experience ambivalence about their position within this debate. This is important because understanding the experience and sources of ambivalence within this group helps understand how this group can potentially help or hinder social change in such contexts. Specifically, we conducted an interview study (n = 15) with Dutch students experiencing ambivalence about the Dutch tradition of Zwarte Piet. We aimed to validate and explore an integration of insights from different literatures (on ambivalence, social identity and system justification) to provide a better understanding of the experience and sources of ambivalence in contentious societal debates. We thematic analysis of the interview transcripts, that resulted in an account of different relevant aspects of the experience- and role of ambivalence in the societal debate concerning Zwarte Piet. Along with, central themes concerning potential sources of ambivalence in this topic, suggesting that key sources for ambivalence are conflict within and between personal-, as well as interpersonal-, group- and societal factors.

### **Investor Memory**

## Paul Smeets, Katrin Godker, Peiran Jiao, and Paul Smeets Maastricht University

How does memory shape individuals' financial decisions? We find experimental evidence of a self-serving memory bias. Subjects over-remember their positive investment outcomes and under- remember negative ones. In contrast, subjects who did not invest but merely observed the out- comes do not have this bias. The memory bias affects individual beliefs and decisions to re-invest. After investing, subjects form overly optimistic beliefs about their investment and re-invest even when doing so leads to a lower expected return. The memory bias is relevant for understanding how people learn from experiences in financial markets and has general implications for individual overconfidence and risk-taking.

Power and Cooperation: A Meta-Analytic Review of Economic Games and Distributive Negotiations

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Power is a fundamental dimension underlying social interactions that can offer profound insights for understanding how people cooperate. Yet thus far, past research offers conflicting evidence on the relation between power and cooperation. We meta-analyze experimental studies of power and cooperation using economic games and negotiation paradigms, both of which are situations in which people are in a conflict between maximizing their own outcomes and providing a benefit to others. Across 85 studies and 104 effect sizes, we find that power has an overall detrimental impact on cooperation (d = -0.313, N = 14,998). Certain experimental manipulations of power show a significant negative impact on cooperation (veto power, endowment heterogeneity, different punishment ratios, and role assignments), whereas others have no significant effect on cooperation (asymmetric alternatives and recalling a powerful time). We further investigate whether manipulations that influence power structurally (i.e., participants have more power) have a different impact than manipulations solely targeting the sense of power (i.e., participants feel more powerful). The results show that both types of manipulations had a comparable impact. Finally, we test for additional moderators such as the type of payment, percentage of male participants, and whether the game is played one-shot or iterated, which had no impact on the relationship between power and cooperation. We discuss the theoretical implications, add suggestions for the methodologies used to study power, and propose directions for future research.

### How do people spend money they save by behaving pro-environmentally?

## Lieke Dreijerink, Michel Handgraaf, Gerrit Antonides Wageningen University

Saving energy usually also implies saving money. This extra money may subsequently lead to additional consumption that requires energy. This is called the indirect rebound effect. Our study focused on establishing the existence of an indirect rebound effect and it's potential moderators in a consumer experiment. In a preregistered study we investigated whether participants (242 MTurk members): 1. Are subject to the indirect rebound effect; 2. Are unaware of the indirect rebound effect; 3. Can be made aware of their inconsistent behaviour; 4. Will show less indirect rebound when made aware. Participants completed a task on promoting cycling in cities (taskfocus: environmental vs. financial) and were then asked choose between rewards that varied in environmental impact (impact information: yes/no). Results showed that financial focus participants who received information made a less impactful choice than when they did not receive information, while environmental focus participants made a higher impact choice after receiving information. Possible explanations will be discussed.