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Ghafaryanshirazi  
(Stewart) Yasaman

Relations between  
Emotional  
Intelligence and  
Narratives: An  
Integrative Review

This article reviews the theories and empirical evidence supporting the relationship between narrative and Emotional Intelligence (EI). The studies are reviewed to answer three questions. First, what is the role of language and narrative in each developmental stage for the development of EI? Second, what features of the language and narrative could be beneficial for the development of EI, and which ones are more salient in each developmental stage? To answer these questions, theoretical levels of EI are developmentally divided into multiple levels of ER processes. As such, EI is conceptualized as (a) EI as temperament, (b) EI as learned ruled-based skills (c) EI as self-aware ER. Further, these developmental levels of EI are compared to the developmental levels of narrative and language representations. The aim is to examine each prominent domain of narrative development as it is related to changes in levels of language representations and the development of EI from infancy to adulthood. The article concludes with a discussion of important narrative features and processes for EI in each developmental stage and ends with a proposal for a conceptual framework for narrative-based interventions.

Lehtonen Suvi

Effects of unilateral  
hippocampal AAV-  
injection and lens  
implantation on  
mouse behavior  
and adult  
hippocampal  
neurogenesis

Hippocampus is essential for episodic memory, and several lesion studies have demonstrated its role in learning of spatial and temporal features of events. In addition, it is involved in processing of non-spatial information, such as object recognition. Adult hippocampal neurogenesis (AHN) in the dentate gyrus (DG) has been previously linked to spatial learning, and a commonly used adone-associated viral vector (AAV) injected to the DG has been suggested to decrease AHN. We examined whether the AAV injection and chronic gradient-refractive index (GRIN) lens implantation to the dorsal DG, required for calcium imaging, impact the behavior of mice. To this end, we conducted an open field task and hippocampal dependent learning tasks (object-recognition and object-location task) to adult male C57BL/6 mice three times: at baseline, after viral vector injection, and after lens implantation, and later immunolabeled adult-born granule cells using doublecortin. We found a decrease in AHN ipsilaterally to the injection, confirming that the viral vector disrupts AHN. However, we also demonstrated that neither this nor the lesion caused by the GRIN lens have adverse effects on behavior and learning. These findings suggest that calcium imaging can be used in behavioral experiments without a fear of disrupting normal behavior of the animals.

Linnunsalo Samuli

Psychophysiological responses to eye contact with a humanoid robot: Influence of perceived intentionality

Eye contact with a humanoid robot has been shown to elicit similar psychophysiological responses to eye contact with another human. However, it is becoming increasingly clear that the attention- and affect-related psychophysiological responses differentiate between direct (toward the observer) and averted gaze mainly when viewing faces that are capable of social interaction, instead of pictorial or pre-recorded stimuli that have no such capability. It has been suggested that genuine eye contact, as indicated by the differential psychophysiological responses to direct and averted gaze, requires a feeling of being watched by another mind. In the present study, we measured event-related potentials (N170 and frontal P300) with EEG, facial electromyography, skin conductance, and heart rate deceleration responses to seeing a humanoid robot's direct versus averted gaze, while manipulating the impression of the robot's intentionality. The results showed that the N170 and the facial zygomatic responses were greater to direct than to averted gaze of the robot, and independent of the robot's intentionality, whereas the frontal P300 responses were more positive to direct than to averted gaze only when the robot appeared intentional. The study provides further evidence that the gaze behavior of a humanoid robot elicits attentional and affective responses and adds that the robot's seemingly autonomous social behavior plays an important role in eliciting higher-level socio-cognitive processing.

Makkonen Anna

Commuting actively or passively? Predicting the commute mode choice of 10,983 Finnish public sector employees

Aims: Encouraging cycling or walking to work can lead to reductions in greenhouse gas emissions, air pollution, and traffic congestion and may improve individual health. A better understanding of the determinants of commute mode choice is needed for effective interventions targeted to increase sustainable and active commuting. , Methods: Using logistic Lasso (least-absolute-shrinkage-and-selection-operator) regression on survey data from the Finnish Public Sector Study (N=10983), we determined the most important predictors of commuting by 1) bike or foot (an active mode) and 2) by car (a passive mode) among employees with a short commute length of five kilometers or less. , Results: Both models had a good predictive ability with C-index of 0.77 and 0.72. Cycling and walking were predicted by shorter journey length, high physical activity, low BMI, female gender, and good work climate. In contrast, commuting by car was predicted by longer journey length, high BMI, low physical activity, male gender, and having children 7-18 years old living at home. , Conclusions: It is possible to reliably identify active and passive commuters with a short instrument of five items. This information may be used when designing interventions and nudging employees to more sustainable and health-promoting commuting modes. , , , Keywords: commute mode, sustainability, occupational health,

Mei Ying

General anxiety and reading anxiety in dyslexia: behavioral, neural, and psychophysiological research

The purpose of the study is to use an experimental design that utilizes generalization paradigm combined with Electroencephalogram(EEG) to explore the behavioral and neural mechanism of general anxiety in adults, and combine difficult reading tasks with heart rate (HR) and skin conductance response (SCR) to investigate psychophysiological mechanism of domain-specific anxiety and unravel the complex relationship between reading-related anxiety and general anxiety. Dyslexia is a neurodevelopmental disorder characterized by difficulties in reading, writing, and spelling. It is one of the most common learning disorders in the world, affecting 20% of the population (Shaywitz et al., 2021). Having dyslexia has a negative impact on overall well-being and quality of life, covering several social psychology functions, such as poor social intercourse ability, low level of peer acceptance and self-awareness, more anxiety and behavior problems, and a high juvenile crime rate (Huang et al., 2020). Among those negative impacts, anxiety related symptoms, such as fear, stress and worry feelings are the emotional experience dyslexia experiences most (Alexander-Passe, 2008; Wilmot et al., 2023). Typically, the social and academic pressure faced by dyslexic individuals contribute to the development of anxiety symptoms (Novita, 2016). This anxiety in turn impairs attention, working memory and information processing that is crucial for reading and learning (Vytal et al., 2013). Although much research has shown that dyslexic individuals often exhibit higher levels of anxiety compared to their peer without dyslexia (see Livingston et al., 2018 for review), the exact behavior, neural and psychophysiological mechanisms underlying anxiety in dyslexia are not yet clarified. In addition, the extent to which these anxiety symptoms are only driven by domain-specific anxiety (i.e., reading-related anxiety) or has generalized to general level anxiety are also not well understood.

Seppälä Ippa

Infant gaze dynamics and deep learning

Infant gaze behaviour is known to be affected by social cues: especially the face and facial expressions as well as gaze-guiding cues such as pointing and speech., We are interested in studying the typical behaviour of infants while watching socially loaded videos with social and gaze-directing cues. Using annotation software we are able to find the exact location of visual cues and to calculate the typical behaviours of infants that have viewed these videos. We use kernel density estimation methods to compute a typicality score for each viewer and maximum likelihood to find the most typical behaviour., We have built a deep learning model that predicts this typical gaze behaviour and will use the results of the typicality analysis as ground truth for the predictions. The goal is to predict typical behaviour in different types of social scenes and to use these predictions to test different hypothesis relating to social distraction and salience of different types of visual and vocal cues during video viewing.

Skrifvars Jenny

"It made me forget everything that had happened to me."  
Asylum seekers' experiences of the official asylum interviews in Finland

Recent research has highlighted shortcomings in the asylum interviews, however, only one previous study has focused on the asylum seekers' subjective experiences of the interviews. To improve asylum interviewing practices, more knowledge from the asylum seekers' perspective is needed. In the current study, 55 individuals, who have applied for asylum in Finland and have participated in at least one official asylum interview, answered an online questionnaire. The questionnaire consisted of rating scale and open questions and was available in five different languages. The respondents (n = 16 female, n = 38 male) were originally from six different countries, and the majority had applied for asylum between 2016–2022. The respondents reported both positive experiences, such as the interview questions being polite and sensitive, and negative experiences, such as not feeling safe, issues with the interpretation or that the officials had insufficient knowledge about the asylum seeker's home country. A central finding was that ¾ of all respondents reported that they did not feel safe or comfortable enough to share everything that had happened to them, due to the interviewers' behavior or the interview situation. This is in line with previous research and highlights the importance of rapport building in asylum interviews. However, due to the small sample and limited previous research, more research is needed before any conclusions can be drawn. Future research should focus on how to improve rapport building in the asylum interview context which could lead to improved information elicitation.

Sorsa Aino

Brain responses to speech sounds in adults with and without childhood dyslexia

Developmental dyslexia is a difficulty in learning to read despite normal intelligence, educational opportunities and sensory acuity. Deficit in phonological processing is one key risk factor associated with developmental dyslexia. Previous studies have also shown deficit in speech sound processing in dyslexia, which could be linked to atypical phonological processing. The neural basis and the development of speech sound processing deficit in developmental dyslexia has been widely studied in childhood, but how it persists into adulthood remains poorly understood. Here we examined how persistent the group differences in speech perception are between individuals with and without dyslexia from childhood to adulthood. The present study is a part of the Jyväskylä longitudinal study of dyslexia (JLD). Participants were approx. 26 years of age, and they have been involved in JLD since their birth. They have been divided into three groups based on their childhood reading skills at the end of grade 2: reading disabilities and family risk (RDFR, N=15), typical readers and family risk (TRFR, N=34) and typically reading controls (TRC, N=35). We investigated brain responses to pseudowords *atta*, *ata*, *appa* presented in an oddball paradigm using event-related potentials/fields in combined electroencephalography (EEG) and magnetoencephalography (MEG) recordings. In this poster we report cluster-based permutation statistics to investigate the differences in ERPs at the sensor level between the groups following the same time window as in school age measurements (50-900 ms). The ERPs followed a typical time course of auditory responses. Statistical comparisons between the groups did not reveal any significant differences for standard *atta* responses. For deviants *ata* and *appa*, significant group differences were found. For *ata* RDFR and TRFR differed, and for *appa* RDFR differed from the other two groups. Results suggest dynamic changes in speech processing in dyslexia during development.

Strid Nanna

Does Natural  
Emotional  
Language Use in  
Dream and Mind-  
Wandering Reports  
Reflect  
Psychological Well-  
Being and Ill-  
Being?

Do the words we describe our experiences with mirror how we feel? Recent decades have seen a growing interest in whether the language people use (e.g., in social media) can reflect their well-being and ill-being. However, little is known about how the content of spontaneous thoughts and experiences—reports of daytime mind-wandering (daydreaming) and nighttime dreaming—reflects waking well-being and ill-being. Here, we investigated the relationship between emotional language use in mind-wandering and dream reports and well-being and ill-being. We asked participants to fill in scales measuring different aspects of well-being and ill-being. We then used ecological momentary assessment by asking participants to provide reports of mind-wandering and dreaming in daily logs over a two-week period. 1781 dream reports from 172 healthy adults and 1496 mind-wandering reports from 153 healthy adults were analyzed using the Linguistic Inquiry and Word Count (LIWC) text analysis software. Multilevel regression models showed that measures of ill-being predicted the negative tone ( $\beta = 0.185$ , 95% CI [0.127: 0.245], SE 0.030,  $z = 6.162$ ,  $p = .001$ ) as well as the use of negative emotion words ( $\beta = 0.231$ , 95% CI [0.157: 0.307], SE 0.038,  $z = 6.068$ ,  $p = .001$ ) in mind-wandering reports. Similarly, measures of ill-being predicted the negative tone of dream reports ( $\beta = 0.101$ , 95% CI [0.030: 0.173], SE 0.036,  $z = 2.771$ ,  $p = .006$ ). Additionally, measures of well-being predicted the use of positive emotion words in dream reports ( $\beta = 0.153$ , 95% CI [0.049: 0.257], SE 0.052,  $z = 2.975$ ,  $p = .003$ ). These findings show that natural language use across different states of consciousness reflects waking ill-being and well-being. The results also provide support for the continuity of affective experiences across different states of consciousness. Clinically, these findings may open the doors to novel and more effective prognostic and diagnostic tools in psychology and psychiatry.

Vuori Kaisa

How social norms  
affect sustainable  
commuting?  
Ethnographic  
assessment of norms.

Nudges are behavioral steering methods, which can act as a support for other more traditional ways to affect peoples' choices (for example taxes, laws, subsidies). They can also be used to steer climate change related behaviors. Other phenomenon that has proven to have considerable effect on individuals' choices are social norms. The paper uses a bricolage of methods from ethnology and behavioral sciences to study the commuting habits of teachers and school children. I will investigate what kind of assessment of social norms should be done for the subject group before the nudge intervention and how social norms can be measured. I will conduct ethnographic fieldwork in Finnish schools, where the students and teachers will be nudged into more sustainable commuting. The fieldwork is done in the January-February of 2022, consisting of research walks done in 4-6 schools. The walks will include observation of the school grounds and interview with the headteacher of the school, janitorial representative and a transport planner from the municipality. An application for mapping geospatial data about school commuting circumstances is used for collecting and equalizing the observations from different schools. The collected data helps with co-creating effective and targeted nudges with the stakeholders. The goal of the interventions is to increase active transportation methods (e. g. cycling or walking) and decrease private motoring (e. g. parents driving their children to school). The interventions can have a significant influence on the students transportation choices and exercise habits, as well as the air quality around the school.

Zhu Xichu

Walldén Catharina

Failing to Attract a  
Female Partner -  
Are Low Mate  
Value and Mate  
Access Associated  
with Anti-Feminist  
Attitudes in Men?

We tested the hypothesis that individual differences in the capacity to attract female partners can partly result in the development of anti-feminist attitudes in men, as male members of groups with anti-feminist agendas (e.g., incels) state they are motivated by difficulties in finding female romantic or sexual partners. Building on evolutionary theories of female choice (i.e., women being more selective than men when choosing a partner), we investigated if men with low (vs. high) mate value (i.e., desirability as a partner) and low (vs. high) mate access (i.e., access to potential partners in one's local environment), are more likely to hold anti-feminist attitudes. When women have the ability to freely choose their partners, particularly men with low mate value and low mate access are at risk of ending up with no partner. Thus, we hypothesized that low-mate-value and low-mate-access men are prone to turn against sources, such as feminist movements, that have strengthened female choice. We used self-reports of mate access, mate value and anti-feminist attitudes from 159 heterosexual individuals identifying as men. We examined associations between mate value, mate access and anti-feminist attitudes by using structural equation modelling. As expected, men with low (vs. high) mate value displayed more anti-feminist attitudes in terms of sexism. Interestingly, there were no associations between mate value and anti-feminist attitudes in terms of supporting restrictions on women's sexual freedom, nor between mate access and anti-feminist attitudes. We discuss these findings further.

Sun Yalin