



ALMA MATER STUDIORUM
UNIVERSITÀ DI BOLOGNA
DIPARTIMENTO DI PSICOLOGIA
"RENZO CANESTRARI"

POSTDOCTORAL RESEARCH SYMPOSIUM 2023 - VIII EDITION POSTDOCTORAL FELLOWS 2022-2023

Department of Psychology "Renzo Canestrari", University of Bologna
Aula 6, November 24th 2023
Viale Carlo Berti Pichat 5 Bologna

9:10-9:15

WELCOME

Elvira Cicognani, Head of the Department

9:15-9:20

INTRODUCTION

Alessandra Sansavini, Research Committee Coordinator

SESSION 1

SOCIAL PSYCHOPHYSIOLOGY AND PSYCHOLOGY

CHAIRS: Francesca Agostini, Elvira Cicognani, Giulia Landi



9:20-9:40 VALERIA BACARO, PHD

The interplay between sleep quality and adolescents' psychosocial development: a meta-analytic project.

Tutor: Elisabetta Crocetti. **Discussant:** Lorenzo Tonetti, U. Bologna; Silvia Casaroli Associazione AS.SO.FA.

Abstract: Sleep is considered a gateway to well-being, positive adjustment, and functioning throughout the life course, especially in adolescence. Healthy sleep can be theorized as a multidimensional construct composed of proper sleep duration, a regular sleep schedule, ease of falling asleep and returning to sleep, and satisfaction

with sleep. However, dramatic changes in sleep duration, schedule, and quality occur in adolescence, possibly leading to poor psychosocial adjustment. Within a socio-ecological framework, factors spanning from the characteristics of the adolescents to the multiple systems in which they are embedded (from the microsystems of family and school to the socio-cultural context) may independently or interactively contribute to aspects of adolescents' sleep health. In line with this reasoning, a meta-analytic project was undertaken to systematically review all longitudinal literature on the interplay between sleep and psychosocial development in adolescents. Eligible studies had to be longitudinal and with adolescent samples. Multiple search strategies were applied until January 28, 2023 to identify relevant research published in peer-reviewed journal articles or available grey literature. Because of the broad scope of this project, data were used to examine a large variety of research questions. Specifically, our work focused on the longitudinal interplay between adolescents' sleep health and physical health (Grimaldi et al., 2023), mental health and positive well-being (Bacaro et al., 2023), digital media use (Pagano et al., 2022), peer, family and school social contexts (De Lise et al., 2022, Maratia et al., 2022, Bacaro et al., 2023), and socio-cultural context (Bobba et al., 2022). Overall, results highlighted a bidirectional relation between sleep health and different aspects of adolescents' psychosocial development.



9:40-10.00 FRANCESCA GOLFIERI

Adolescents' well-being: developmental trajectories.

Tutor: Elisabetta Crocetti. **Discussant:** Lorenzo Tonetti, U. Bologna; Silvia Casaroli Associazione AS.SO.FA.

Abstract: Promoting the well-being of adolescents is a main societal goal. In line with it and within the scope of the IDENTITIES project, the aim of the current longitudinal study was to tackle the developmental trajectories of adolescents' well-being. A multidimensional perspective was adopted in order to uncover

changes in adolescents' physical health (general health perception and sleep problems), subjective well-being (life satisfaction and emotional well-being), psychological and social well-being. Furthermore, a second goal was to examine differences between boys and girls and between Italian adolescents and their peers with a migrant background. Participants were 1,416 students (50.2% girls) from two cohorts (49.6% were attending the first year of high school and 50.4% were attending the third year) who completed a questionnaire at four time points (January/February 2022, April/May 2022, September/October 2022, and January/February 2023). Results showed that physical health perception slightly decreased, while life satisfaction, social and psychological well-being increased, and sleep problems remained stable over time. Also, emotional well-being showed a non-linear trend over time. In addition, differences between boys and girls and between Italian adolescents and their peers with a migrant background were mainly detected in the intercepts. Boys and Italian adolescents generally reported higher well-being than girls and adolescents with a migrant background. Overall, this evidence suggests the importance of developing interventions to promote adolescents' well-being.



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10:00-10:20 ANTONELLA GUARINO, PHD

The role of social justice engagement in young migrant activists and non-activists.

Tutor: Cinzia Albanesi. **Discussant:** Gabriele Prati, U. Bologna; Daniele Limonta.

Abstract: Background: Youth social justice engagement is the involvement of young people in collective, organised action and analysis of the root causes of an identified issue aiming at reallocating power resources and relations among oppressed people. The empowerment framework refers to the processes and outcomes of sharing powers and privileges to promote awareness and participation of young people.

Objective: The present study explores young people's engagement in third-sector organisations and social movements to promote social justice for people with a migration background and the representation of social justice in third-sector organisations. **Methodology:** Twenty semi-structured interviews were conducted with young volunteers and activists from thirteen organisations. Data from the organisations' websites (homepages) were also collected. **Results:** A reflexive thematic analysis showed that young people developed self-awareness and critical awareness of migration, privilege, and power relationships, regardless of their background. They also envisioned collective participation as a necessary step to pursue social justice. The representation and meanings of social justice in organisations represent a general set of theoretical values and ideals to which young people are committed, challenging their chances to put them in practice. **Conclusions:** These results can be considered a challenge for the third sector organisations when dealing with young people and those at risk of discrimination in promoting values of social justice, by supporting reciprocity and mutual support activities and avoiding patronising attitudes.



10:20-10:40 SAVAŞ KARATAŞ, PHD

Navigating across heritage and destination cultures: how personal identity and social identification processes relate to domain-specific acculturation orientations in adolescence.

Tutor: Elisabetta Crocetti. **Discussant:** Francesca Prati, U. Bologna; Silvia Casaroli Associazione AS.SO.FA.

Abstract: Personal identity and social identification processes can be challenging for adolescents belonging to an ethnic minority, who have to cope with the acculturation task of navigating several (and often conflictual)

alternatives put forth by their cultural heritage community and destination society. Because identity and acculturation tasks are embedded in core domains of adolescents' life, this three-wave longitudinal study with ethnic minority adolescents ($N=244$, 43.4% male; $M_{age}=14.9$) examined how personal identity processes and social identifications are related to acculturation orientations in the education and friendship domains. Results of traditional cross-lagged models showed that, in the educational domain, adolescents who scored higher on cultural heritage maintenance compared to their peers, scored higher on commitment later on. In the friendship domain, stronger associations were found, such that adolescents who scored higher on cultural heritage maintenance compared to their peers, reported higher commitment and in-depth exploration later on, while those who scored higher on identification with friends reported over time also higher cultural heritage maintenance and destination culture adoption. Random-intercept crossed-lagged models indicated that, when adolescents reported above their own average on reconsideration of educational commitment, they reported increased cultural heritage maintenance later on. Furthermore, consistent associations (at baseline and over time) emerged. Overall, this study points to virtuous alliances between the fulfillment of tasks related to adolescents' identity development and acculturation.

SESSION 2

COGNITIVE NEUROSCIENCE

CHAIRS: Elisabetta Crocetti, Alessandra Sansavini, Gerardo Petruzzello



10:40-11:00 JESSICA GALLINA, PHD

Alpha and theta rhythm support periodical sampling of visual stimuli in a visual detection task.

Tutor: Caterina Bertini. **Discussants:** Vincenzo Romei, U. Bologna; Luca Ronconi, U. Vita-Salute San Raffaele.

Abstract: The visual system operates rhythmically, through a timed coordination of perceptual and attentional processes, involving coexisting oscillatory patterns in alpha (10-12 Hz), and theta (3-7 Hz) range. Here we aimed at disambiguating whether variations in task requirements, in terms of attentional demand and side of target

presentation, might influence the occurrence of either perceptual or attentional components in behavioral visual performance, also uncovering possible differences in the sampling mechanisms of the two cerebral hemispheres. To this aim, visuospatial performance was densely sampled in two versions of a visual detection task where the side of target presentation was fixed (Task 1), with participants monitoring one single hemifield, or randomly varying across trials, with participants monitoring both hemifields simultaneously (Task 2). Performance was analyzed through spectral decomposition, to reveal behavioral oscillatory patterns. For Task 1, when attentional resources were focused on one hemifield only, the results revealed an oscillatory pattern fluctuating at ~ 10 Hz and $\sim 6-9$ Hz, for stimuli presented to the left and the right hemifield, respectively, possibly representing a perceptual sampling mechanism with different efficiency within the left and the right hemispheres. For Task 2, when attentional



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resources were simultaneously deployed to the two hemifields, a ~5 Hz rhythm emerged both for stimuli presented to the left and the right, reflecting an attentional sampling process, equally supported by the two hemispheres. Overall, the results suggest that distinct perceptual and attentional sampling mechanisms operate at different oscillatory frequencies and their prevalence and hemispheric lateralization depends on task requirements.



11:00-11:20 GIANLUCA FINOTTI, PHD

The role of beta desynchronization in cue guided decision making.

Tutor: Giuseppe Di Pellegrino. **Discussant:** Sara Garofalo, U. Bologna.

Abstract: Environmental cues (like the logo of a diner) exert a powerful influence on our daily choices. Although intrinsically neutral, such cues acquire predictive and motivational value through their pairing with a rewarding outcome (e.g., food) and, thus, bias future choices by triggering reward-seeking behavior. However, the mechanism through which such reward-associated cues exert their influence on human choice is yet to be clarified. We propose that intimate and bidirectional links between decision, behavior and the cortical motor system may be at the core of this phenomenon. More precisely, we hypothesize that the extent to which a reward-associated cues bias choice is associated with motor-related changes in brain rhythms in response to the presentation of such cues. To test this hypothesis, 42 participants completed a Pavlovian-to-Instrumental Transfer (PIT) task while we recorded the electroencephalographic (EEG) signal was. The PIT task was structured in three phases: (1) Instrumental conditioning phase, in which the participant learned two response-outcome associations (R1→O1 and R2→O2); (2) Pavlovian Conditioning phase, in which the participant learned the association between four reward-associated conditioned stimuli (CS) and their respective outcome (CS1→O1, CS2→O2, CS3→O3, CS-→no outcome); (3) Transfer phase, in which the influence of the conditioned stimulus (CS) on the instrumental response was tested (e.g. CS1: R1 or R2?) under extinction (i.e., no reward is delivered). Crucially, while CS1 and CS2 predicted an outcome previously earned by a specific instrumental action (CS+ action), CS+3 predicted rewarding an outcome that was never associated with an instrumental action (CS+ no-action). The CS- served as an unrewarded control condition. Behavioral results confirmed a robust PIT effect across subjects. Analysis of the oscillatory activity revealed decreased beta power and increased theta power in the premotor areas contralateral (but not ipsilateral) to the hand performing the action, selectively associated with the CS+ action condition, as compared to the CS+ no-action and CS- conditions. This activation was observed during the deliberation period, before action execution. These results show the early involvement of premotor activity in cue-guided decision-making, thus supporting the idea - in line with the work on motor cognition and embodied decision-making - that the motor system is not downstream to the decision process, but actively contributes to the influence that reward-associated cues can exert on choice processes.



11:20-11:40 CHIARA SPACCASASSI, PHD

Perturbing the Moral Brain Network via theta burst stimulation: a TMS-EEG study.

Tutor: Alessio Avenanti. **Discussants:** Caterina Bertini, U. Bologna; Giulia Ellena, Istituto Italiano

di Tecnologia. **Abstract:** Judging a scenario where an offender inflicts pain on a victim needs careful evaluation. A complex neural network is engaged during the moral evaluation of this type of scenario, including several nodes involved in the processing of distinct aspects. For instance, the right temporoparietal junction (rTPJ) seems to be dedicated to action intention processing; however, it remains

unclear how this brain area dynamically interacts with the rest of the network to support moral assessment as well as how its communication within the network could be rearranged after its perturbation. To fill this gap, we combined single-pulse transcranial magnetic stimulation (TMS) to perturb rTPJ and electroencephalography (EEG) in order to assess the remote neurophysiological effects of TMS with high-temporal resolution, while participants watched scenarios where an agent harms a victim, either deliberately or inadvertently (Intentional vs Accidental Harm), alongside neutral scenarios. In other two experimental groups, we replicated the same experiment by adding a previous temporary inhibition via theta-burst stimulation of two different brain areas belonging to the moral cognition network: the dorsomedial prefrontal cortex (dmPFC) and precuneus (PC). Analysis on TMS-evoked potentials (TEPs) revealed two significant results in the time-window ranging from 20 to 40 ms from TMS pulse in the rTPJ group: (i) a greater positive TEP over right frontal areas for Intentional than Accidental Harm and (ii) a greater positive TEP over left parietal areas for Accidental than Intentional Harm. No similar effect was observed in the other two groups. When comparing the three groups between each other on the early difference between Intentional and Accidental scenarios, we observed a larger positive TEP over frontal electrodes in the rTPJ group than dmPFC and PC groups, which in turn they did not differ one another. Overall, these findings suggest that, in ordinary conditions, rTPJ causally interacts with other nodes within the moral brain network, namely the frontal areas to supposedly implement moral condemnation related to Intentional Harm, and the contralateral parietal areas, possibly serving to assess intentionality in scenarios depicting Accidental Harm. Importantly, the communication between rTPJ and frontal-parietal areas when watching (im)moral scenes would be cancelled by the prior perturbation of both dmPFC and PC areas. Particularly, it seems that the way the frontal areas make the difference between Intentional and Accidental Harm scenarios stand out after rTPJ stimulation, has been reversed by the previous inhibition of dmPFC and PC areas, possibly indicating an opposing moral evaluation of the scenarios.



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11:40-12:00 ALBERTO MASSIMILIANO UMITÀ, PHD

The role of familiarity in boundary extension.

Tutor: Elisa Ciaramelli. **Discussants:** Caterina Bertini, U. Bologna; Flavia de Luca, U. Sussex.

Abstract: Boundary extension (BE; Intraub & Dickinson, 2009) is a memory error where individuals remember scene details extending beyond their original boundaries, whereas boundary contraction (BC) reflects the opposite tendency. BE research varies in stimulus types and proposed causes. Some suggest it reflects scene reconstruction from internal representations (Mullally, Intraub, & Maguire, 2012); others argue that it results from image-related factors like central object quantity and angles (Intraub & Dickinson, 2009). Since familiarity for a scene is a crucial aspect that can enrich its neural representation, it was predicted to increase the tendency to extend the scene beyond its borders, with familiar scenes inducing more BE than non-familiar scenes.

In Study 1, young adults rated the familiarity of real-world location images. Subsequently, participants performed a RSVP task in which they viewed a scene twice in rapid succession and indicated whether the second time they saw the image, it appeared the same, closer, or farther away than the first (see also Bainbridge, Hall, & Baker, 2019). The perceived change in proximity was rated on a scale ranging from -100 (closer) to +100 (farther), with 0 representing no change. The ongoing Study 2 involves participants from Bologna and Toronto, who are engaging in the same task using the most familiar images of their respective cities.

The results of Study 1 revealed a consistent tendency for BC across all scenes, and this effect was more pronounced for familiar compared to unfamiliar scenes. We plan to replicate the BC effect in Study 2, with individuals from Bologna demonstrating heightened BC for scenes from Bologna, and the opposite pattern for individuals from Toronto. Our findings confirm the assumption that image-related factors modulate the way we extrapolate information from a scene, leading to BC -as opposed to BE- for scenes. Moreover, familiarity increased BC, possibly due to increased self-projection.

12:00-13:00 LUNCH BREAK

SESSION 3

CLINICAL, DEVELOPMENTAL, COMMUNITY PSYCHOLOGY AND PSYCHOMETRICS

CHAIRS: Danilo Carrozzino, Maria Grazia Benassi, Marilena Aiello



13:00-13:20 GRAZIANO GIGANTE

The ESCAPE Study: a blended collaborative care approach for integrated care of elderly heart failure patients with physical and psychological multimorbidity.

Tutor: Chiara Rafanelli. **Discussants:** Elena Tomba, U. Bologna; Danilo Carrozzino, U. Bologna.

Abstract: Introduction: Heart failure (HF) is a relevant cause of mortality, morbidity, hospitalizations and reduced Health Related Quality of Life (HRQoL) in European countries. The common association of HF with not only somatic, but also mental comorbidities, such as anxiety and depression, which can heavily affect prognosis and adherence to treatment, requires an integrated care. Yet, multimorbidity is often not treated adequately in healthcare systems, mainly for the presence of relevant treatment gaps and fragmented care delivered by different health providers. In literature, Blended Collaborative Care (BCC) studies conducted in the USA, focusing on a team-based approach addressing both somatic and mental comorbidities, have been shown to be effective in reducing the burden linked to these conditions. ESCAPE aims to enhance quality of care and HRQoL by testing in Europe a personalized BCC intervention, backed by advanced information and communication technology, and supported by a meta-algorithm for multi-morbidity to optimize patient-centred treatment plans. Methods: ESCAPE is conducting an observational cohort study across six European countries to recruit patients with heart failure, mental distress/disorder, and at least two medical co-morbidities. Within the cohort study, a randomized controlled assessor-blinded two-arm parallel group interventional clinical trial will be conducted on 300 patients. The patients in the experimental group will receive regular support from trained care managers (CMs) who will work with a clinical specialist team to remotely assist patients in implementing a personalized treatment plan that addresses their individual needs and preferences. An eHealth platform with an integrated patient registry will guide the intervention and empowers patients and their informal carers. Results: At the present time, no results are available yet. Future results will be focused on various elements: the primary outcome will be HRQoL measured using the EQ-5D-5L, while secondary outcomes will include medical and patient-reported outcomes, healthcare costs, cost-effectiveness, and informal carer burden. The assessments will be conducted at 9 and ≥18 months. Conclusions: The ESCAPE BCC has the potential to be part of routine care for elderly patients with HF and somatic and mental morbidities.



13:20-13:40 GIULIA LANDI, PHD

A pilot randomised control trial of an online Acceptance and Commitment Therapy (ACT) resilience training program for people with multiple sclerosis.

Tutor: Silvana Grandi. **Discussants:** Eliana Tossani, U. Bologna; Lucia Golfieri, IRCSS Sant'Orsola.

Abstract: Background: This pilot study explored the effectiveness and feasibility of an online version of a group acceptance and commitment therapy (ACT) resilience training intervention for people with



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multiple sclerosis (PwMS), called e-READY for Multiple Sclerosis (MS). Methods: Fifty-six PwMS were randomized to intervention (n = 31) or waitlist control (WLC) (n = 25). The primary outcome, resilience, and secondary outcomes (quality of life (QoL), distress, psychological flexibility) were assessed at pre- and post-intervention and 12-week follow-up. Results: Intervention participants reported greater pre- to post-intervention improvements in anxiety ($d = 0.56$) and stress ($d = 0.62$) than WLC. Gains were maintained at follow-up. Confidence intervals revealed a trend for the intervention group to report greater improvements than WLC across all outcomes. Reliable Change Index data showed that, compared to WLC, there were trends for more intervention participants to evidence clinically significant improvements in physical health QoL. Recruitment response was weak, intervention retention was good, adherence to program progression guidelines was satisfactory, program usability satisfaction was high, and study protocol attrition at post-intervention and follow-up was low and high, respectively. Most participants viewed the intervention as enjoyable, helpful, and resilience-building, and would recommend it to other PwMS. Qualitative feedback validated the usefulness of intervention tools and digital delivery mode and bolstered resilience through improved ACT-related skills. Conclusions: Effectiveness and feasibility results from this proof-of-concept study provide preliminary support for the e-READY for MS program.



13:40-14:00 ALESSIA BERACCI, PHD

Assessment of the effectiveness of an intervention aimed at reducing motor hyperactivity in dementia: an actigraphic study.

Tutor: Lorenzo Tonetti. **Discussant:** Rabih Chattat, U. Bologna; Elisa Di Rosa, U. di Padova.

Abstract: Background: A worldwide demographic shift to an aging population caused an increase of disorders as dementia. Persons living with dementia (PWD) reported several behavioural and psychological symptoms which increases the institutionalization of these persons and the caregiver burden (CB). Among

the proposed interventions to reduce the intensity and frequency of behavioural and psychological symptoms of dementia, we find psychosocial trainings based on the integration of social skills, cognitive functions and movement, such as the Hobart Method (HM). Aim: To assess the effectiveness of the HM in the reduction of motor activity in PWD, using the actigraphy as objective measurement. Additionally, we used a self-report measure of burden, the Zarit Burden Interview (ZBI), in order to verify whether the possible positive outcomes due to the HM correspond to a real decrease of the CB. Method: An intervention group (IG), composed by 28 PWD (age= 79.7 ± 4.7 y) who participated for 3 months to the HM training and a control group (CG), composed by 17 PWD (age= 78.3 ± 4.2 y) who did not attend the training were enrolled, with their respective caregiver. Each PWD was requested, at two different time-points (T0 and T1), to wear an actigraph for seven consecutive days, during both daytime and nighttime, while each caregiver filled the ZBI at T0 and T1. Results: At T1, results showed a decrease in total sleep time in both groups, although double in CG than IG, while an increase in daytime motor activity in the CG only. Moreover, we did not find a significant difference of the ZBI scores in both caregiver groups. Conclusions: Although these data seem to show a potential protective role played by the HM, future study should rule out the possible effect of the season of assessment and the consequent changes in photoperiod length.

14:00-14:20 ANNALISA CECCONI

Evaluation of the project "Educativa di Strada" for socially vulnerable youth in Cesena.

Tutor: Carlo Tomasetto. **Discussant:** Cinzia Albanesi, U. Bologna; Federica Fantozzi, Educativa di Strada, Comune di Cesena.

Abstract: The project "Educativa di Strada", promoted by the Municipality of Cesena starting from 2022, aims at fostering positive development and inclusion of a group of socially vulnerable young adults, by reducing at-risk behaviors and conflictual relationships with the community. We conducted an evaluation of the first year of

implementation of the project, with respect to the goals that the Municipality had set. Because of the informality and de-structuration of the setting and the youth workers approach, a qualitative method was adopted; data were collected through participant observation, interviews with youth workers and local stakeholders, field notes, a focus group with the young adults involved and analysis of written documents (youth workers' diary, local press). Results of the evaluation show that engaging the group in activities that are meaningful to them, giving them responsibilities, letting them take the lead on the development of such activities, and involving local stakeholders and institutions bring to positive outcomes, such as: improvement of self-efficacy and group cohesion, individual skills, sense of belonging and identification with the place, feeling of being acknowledged and valued by the community, and motivation to promote a positive image of themselves and of the place. Also, a less stereotyped representation of the group is promoted. Nevertheless, periods of instability in the youth workers team and changes in the area of intervention entail a growing difficulty in keeping the group engaged, and leave unanswered many of the pre-established goals. Consequently, the positive outcomes are reduced (e.g., substance use, taking care of the place) or remain unachieved (e.g., development of sense of community, active citizenship). In conclusion, when implemented with constancy and regularity, this kind of project can be effective for personal, group and community development. Efficacy can be further improved by constant needs' analysis, continuous training of the youth workers, and moments of collective reflection on the project with the target.





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SESSION 4 COGNITIVE PSYCHOLOGY AND PSYCHOPHYSIOLOGY

CHAIRS: Alessia Tessari, Luca Pietrantoni, Martina Cangelosi



14:20-14:40 ALEXANDRA AFFRANTI

Differential effects of socio-linguistic background and cognitive skills on Language Minority Bilingual Children's L1 and L2 competencies.

Tutor: Paola Bonifacci. **Discussant:** Lorenzo Tonetti, U. Bologna; Valeria Dondoli, Comune di Bologna.

Abstract: The study investigated the differential effects of socio-linguistic background and children's nonverbal reasoning and phonological working memory skills on the heritage language (L1) and L2 linguistic competencies in Language Minority Bilingual Children (LMBC) attending preschool, also considering relationships between the L1 and L2 skills. On a sample of 108 LBMC, a battery of tasks was administered, including vocabulary and morphosyntactic tasks in their L1 and Italian as L2 and phonologic working memory and nonverbal reasoning tasks. Socio-linguistic background included Socio-Economic Status and linguistic history, assessed through parental interviews. Through a set of regression models, results showed that morphosyntactic skills in the L1 and L2 were related to each other, but it was not the case for vocabulary skills. Further, socio-linguistic background had a major impact on vocabulary skills, particularly in L1; conversely, nonverbal reasoning had a major impact on morphosyntactic skills, particularly in L2. The discussion focuses on the importance of supporting the families in providing enriched linguistic input in the heritage language but also reinforces the relevant role of nonverbal reasoning and phonological working memory skills in developing L2 competencies.



14:40-15:00 MARILENA AIELLO, PHD

Changes in the implicit and explicit evaluation of food features with age.

Tutor: Alessia Tessari. **Discussant:** Giovanni Ottoboni, U. Bologna; Antonella Deponte, Associazione de Banfield.

Abstract: Food is one of the most salient and rewarding stimuli in the environment and food choices are daily influenced by factors such as palatability, healthiness and dietary habits (Hare et al., 2011). According to the Reflective-Impulsive Model (Strack & Deutsch 2004), two systems guide eating behaviour: a) the impulsive system guiding approach/avoidance to food based on taste, palatability or its rewarding value; b) the reflective system personally shaped and considering the long-term health food-related consequences. Studies published so far have examined food processing in young adults, but less is known about how the elderly process such cognitive features. This study investigates whether (i) implicit and explicit food evaluations change with age; ii) these changes are related to inhibitory control. Young adults aged 20–30 years and old adults aged 65–85 years were recruited and asked to explicitly rate liking, wanting and healthiness of both high and low-calorie foods and to perform an affective priming task measuring affective reactions towards foods, and a food go/no-go task assessing inhibitory control. Moreover, older adults' general cognitive status and mood were evaluated through the MOCA test and the BDI questionnaire, respectively. Results show no differences between the two groups in either explicit or implicit evaluations of foods. In the go/no-go task, old adults result significantly slower compared to young adults but not more impulsive. Interestingly, in old adults lower MOCA scores were associated with a higher number of false alarms for food and higher BDI scores correlated with a higher number of false alarms for food and a more positive implicit attitude toward high-calorie foods. Taken together these results suggest that age seems not to affect food evaluation or inhibition toward food. They also shed light on interesting correlations between food evaluation, cognitive status and mood, which deserve further investigation.



15:00-15:20 BENEDETTA PERI

A multi-informant approach testing an expanded home numeracy mode.

Tutor: Paola Bonifacci. **Discussant:** Carlo Tomasetto, U. Bologna; Valeria Dondoli, Comune di Bologna.

Abstract: The literature highlights how non-symbolic and symbolic competencies play a key role in the development of mathematical skills. Furthermore, domain-general precursors such as working memory, processing speed, intelligence level and contextual variables, i.e., the quality of the environment, can impact the development trajectory of numeracy skills. The present study used a multi-method and multi-informant approach for investigating the role of home and parent-related variables in concurrently predicting the early numeracy skills of preschoolers. The sample involved 430 preschoolers (males=55.2%), their parents, and 56 teachers. Children's mathematical skills were assessed using objective tests (digit recognition and digit-quantity association tasks) and via questionnaires completed by their teachers. In addition, questionnaires directed to parents were used for collecting information on their educational levels as a measure of SES, the frequency of home literacy and numeracy activities, math attitudes, and expectations toward their child's numeracy ability. The results of the structural equation models showed that children's performance in numeracy tasks and teachers' evaluation of their math skills were directly predicted by their parents' educational level. However, parents' expectancies



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did not significantly predict the home numeracy or children's skills. Finally, this study underlines and reinforces the idea that home numeracy significantly relates to children's early numeracy skills.



15:20-15:40 SILVIA GAMBINO, PHD

Alterations in resting-state functional connectivity in hemianopic patients.

Tutor: Caterina Bertini. **Discussant:** Giuseppe Di Pellegrino, U. Bologna; Elisa Ciaramelli, U. Bologna.

Abstract: Consistent evidence demonstrated a pivotal role of the posterior cortices in regulating alpha (7-13 Hz) oscillatory activity. Therefore, posterior brain lesions, damaging the circuits of the visual system, might affect alpha functional connectivity patterns. To test this hypothesis, eyes-closed resting state EEG signal was acquired from hemianopic patients with left and right lesions, patients without hemianopia with more anterior

lesions and healthy controls. Functional connectivity analysis in the upper alpha range (11-13 Hz) was performed for all groups, separately for the left and the right hemisphere. The results showed that Left-lesioned hemianopics had a reduced intrahemispheric connectivity only in the lesioned hemisphere, whereas right-lesioned hemianopics exhibited reduced intrahemispheric alpha connectivity in both hemispheres. In addition, patient's visual performance was assessed with clinical tests, such as the Computerized Visual Field Test, where patients had to keep their gaze on a central fixation (Fixed-Eyes condition) or were allowed to move their eyes (Eye-movements condition) and Visual Search tests, in which oculomotor behaviour was measured, and correlated to impaired alpha functional connectivity. The results revealed a positive correlation between impaired alpha connectivity in the lesioned hemisphere and patients' performance at the Computerized visual field test in the Fixed-Eyes condition, suggesting that post-lesional alpha connectivity patterns have a strong link with the basic functioning of the visual system, while more strategic, compensatory visual mechanisms seem not related to this connectivity measure.



15:40-16:00 IVAN PATANÈ, PHD

The effect of emotion imitation and observation on interpersonal space regulation.

Tutor: Francesva Frassinetti/Elisa Ciaramelli. **Discussant:** Caterina Bertini, U. Bologna; Alessandro Grecucci, U. Trento.

Abstract: This distance we interpose between ourselves and others, called 'interpersonal space' (IPS), is defined as the distance that cannot be intruded by people without causing discomfort¹ and can be altered in children with Autism Spectrum Disorder (ASD)². However, the mechanisms of IPS regulation remain unclear in

both neurotypical development (TD) and ASD population. In the first study we enrolled 60 TD children (M age= 12.50) to investigate whether the sensorimotor component of emotions is involved in IPS regulation. We employed a Stop-Distance task³ where participants had to stop a Happy, Neutral, or Anger avatar at a comfortable distance. In the experimental group we measured distances before and after an imitation session, where participants imitated emotional faces. In the control group participants underwent the Stop-distance task before and after an exposure session where they were passively exposed to the same emotional faces. In the experimental group, participants chose a larger distance with Angry Avatars and a shorter distance with Happy Avatars after, as compared to before, the imitation session. We did not find any modulation following the exposure session in the control group. In the second study we studied whether ADS were capable of modulating IPS depending on the emotion expressed by the others. We administered our virtual reality Stop-distance task to both ASD and TD children. Preliminary findings from 9 ASD participants (M age = 13.55) and 9 TD children revealed that ASD children maintained larger distances overall compared to TD children. However, both groups exhibited similar modulations in their distances based on the expressed emotions of others. These results show that the embodiment of others' emotion regulates IPS and suggest that ASD disrupts the automatic regulation of IPS but not the possibility to modulate it with external emotion cues.

SESSION 5

WORK, ORGANIZATIONAL, SOCIAL, AND COGNITIVE PSYCHOLOGY

CHAIRS: Vincenzo Romei, Luca Pietrantoni, Alessia Beracci



16:00-16:20 SOFIA MORANDINI

Adopting AI in Organizational contexts: challenges, opportunities, expectations.

Tutor: Luca Pietrantoni. **Discussants:** Marco De Angelis, U. Bologna; Francesco Tommasi, U. Verona.

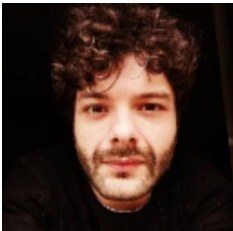
Abstract: Artificial Intelligence (AI) is becoming an integral part in organizations, transforming organizational structures, workflows, and employee roles (Kurup & Gupta, 2022). As the presence of AI grows, enhancing human-AI collaboration has become a priority. Cañas (2022) notes that AI integration can improve collaboration and support employees in their tasks. However, it's vital to understand AI's influence on

worker decisions (Chen et al., 2023) and factors that determine collaboration efficiency. While AI showcases remarkable decision-making skills, its inner workings can be elusive to users. This lack of transparency can hinder trust and impede fruitful collaboration between employees and AI systems. In this context, a human-centric approach offers a pathway to design more transparent and user-friendly AI systems, ultimately deepening trust and facilitating better human-AI interactions. The TUPLES project, funded by Horizon Europe, aims to strengthen the bond between workers and AI systems, especially in Planning and Scheduling (P&S) tasks. A



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TUPLES use case is the aircraft manufacturing sector, known for its complex P&S requirements. In this domain, managers and technicians face challenges such as unpredictable task durations, variable resources, and interconnected tasks. To address these challenges, TUPLES is developing an advanced AI-powered Decision Support System (DSS) tailored for the workforce. We conducted semi-structured interviews with managers and technicians of the company at a primary facility of the aircraft manufacturing partner. We explored participants' roles and responsibilities in P&S, delved into the challenges they face, especially those related to task interdependencies, uncertainties, and management of schedule changes. We further probed into their expectations from the new DSS, emphasizing desired features, its explainability, and its impacts, in terms of skill enhancement, stress reduction, and energy consumption. Additionally, to grasp how participants view and prioritize DSS-related information, we employed the Card Sorting Technique, which showed how participants categorize information based on their roles, experiences, and perspectives.



16:20-16:40 GERARDO PETRUZZELLO, PHD

The role of career self-management and career resources in early career stages: new perspectives from the career sustainability framework.

Tutor: Marco Giovanni Mariani. **Discussants:** Greta Mazzetti, U. Bologna; Giorgio Lorenzi, Gruppo AVM.

Abstract: *Background.* Since the transition to the world of work is growing more uncertain and less linear, career sustainability is a desirable output of this developmental stage. The career sustainability framework attributes crucial importance to the role of career resources in safeguarding or fostering sustainability. However, more empirical inquiry is demanded by scholars to explore how career resources are accumulated and the interplay between career resources and indicators of sustainability. *Aim.* This work presents two studies exploring career resource dynamics during the transition to work. Study 1 examines whether extra-career behaviours activate a serial mediation process of self-management that leads to accumulating career resources. Study 2 investigates the reciprocal association between perceived employability (i.e., a career resource) and psychological well-being (i.e., career sustainability indicator). *Method.* Both studies involved independent samples of Italian university students and recent graduates. Study 1 (N = 229) employed a cross-sectional design to collect data, analysed with SPSS PROCESS macro. Study 2 (N = 376) adopted a three-wave longitudinal design; data were analysed with a Random Intercept Cross-Lagged Panel Model approach, which allows for testing the hypothesised relationships differentiating within-person and between-person effects. *Results.* The findings of Study 1 support the hypothesised serial mediation, corroborating the idea that extra-career behaviours trigger a self-management process leading to accumulating career resources. Study 2 supported the hypothesised reciprocal association at the between-person level, yet mixed findings were obtained at the within-person level. *Implications and conclusion.* These findings provide unique insights into how career resources are formed and contribute to career sustainability, thus progressing the career sustainability theorising. Moreover, they produce indications to inform interventions to help new entrants foster their career resources and endorse a sustainable transition to work.



16:40-17:00 MARTINA CANGELOSI, PHD

Family Language Policies: fostering an integrated linguistic-psychological perspective.

Tutor: Paola Bonifacci. **Discussant:** Claudia Borghetti, U. Bologna; Valeria Dondoli, Comune di Bologna.

Abstract: Family Language Policies (FLP) are the ways in which languages are managed, learned, and negotiated within multilingual family contexts, in relation to linguistic beliefs and ideologies (King, et al., 2008). We involved families of preschool children in which at least one parent speaks a minority language other than Italian, divided into three groups based on the prevalence of use in the family, i.e., prevalence of Italian use within the family context, balanced use of Italian and of the heritage language (HL), prevalence of use of the HL. The aim of the project was to understand the impact of FLP on 1) parental sense of competence, 2) children emotional and behavioral well-being, and 3) children's linguistic skills in their L2 (Italian). More in detail, we aimed to explore the effect of language usage on these dimensions, considering families' sociolinguistic background, and parental beliefs about multilingualism. To answer these questions, a multi-method approach has been adopted. We combined quantitative questionnaires, qualitative thematic analysis (interviews on FLP with parents), and objective tests for the assessment of children's vocabulary and morphosyntactic skills in their L2. Results from MANCOVAs comparing our three groups on the above-mentioned dimensions will be discussed. Considering bilingualism with a more systemic approach may have a concrete impact on school and family policies. More in detail, the study might contribute to reducing elements of discomfort and social divide in populations from minority linguistic-cultural backgrounds.

17:00-17:20 ALESSANDRA SACINO, PHD

The role of sexualisation on risk perception in young women.

Tutor: Michela Menegatti. **Discussants:** Carlo Tomasetto, U. Bologna; Ilaria Giovannelli, U. G.d'Annunzio Chieti-Pescara

Abstract: Research grounded on objectification theory highlighted many negative consequences of self-objectification for women. Among others, self-objectification is associated with a higher risk of sexual assault and a higher tolerance towards sexual abuse. In this study, we examined the role of the broader construct of sexualisation on women's perception of risk for sexual assault. The



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main purpose of the present study was to explore the role of the endorsement of sexualised gender stereotypes, enjoyment of sexualisation, and self-objectification as possible antecedents of women's risk perception. Young undergraduate female participants (N = 510) completed measures assessing the endorsement of sexualised gender stereotypes about men (i.e., men are sex-driven) and women (i.e., women are sex objects), enjoyment of sexualisation, self-objectification (i.e., internalization of an observer's perspective on their body), and risk perception. Structural equation modelling showed that the beliefs that men are sex-driven and self-objectification were associated with higher risk perception, whilst the belief that women are sex objects was associated with lower risk perception. Crucially, the effects of self-objectification and the belief that women are sex objects were partially mediated by a specific dimension of the enjoyment of sexualisation: the enjoyment of receiving sexual attention from men. On the contrary, the enjoyment of self-sexualisation as a means of taking control of oneself sexuality was not associated with risk perception. These findings suggest that different dimensions of self-sexualisation and self-objectification may affect women's risk perception as a function of how much they consider their bodies to obtain men's appearance-based attention.

Postdoctoral Fellows' Tutors are Professors at the Department of Psychology. **Chairs for each session** are two members of the Department Research Committee and a Postdoctoral Fellow. **Postdoctoral Fellows will be in presence. Tutors, Discussants, new Postdoctoral Fellows who will present next year, PhD students and all interested colleagues can attend the PhD day either in presence or connecting by Teams.**

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