



BLENDING INTENSIVE PROGRAMME (BIP) 2022

Master Degree in Psychology

**Self-regulation and wellbeing:
an integrated perspective**

ABSTRACTS BOOK

Host institution: University G. d'Annunzio of Chieti-Pescara (UdA), Department of Neuroscience, imaging and clinical sciences, Master Degree in Psychology

Partners institutions: ISPA (Lisbon, Portugal), University of Latvia (Riga, Latvia)

Faculty:

- Baiba Martinsone and Liena Hačatrjana from the University of Latvia
- Manuela Verissimo and António J. Santos from ISPA
- Giorgia Committeri, Sergio Di Sano, Francesca Ferri, Francesca Lionetti, Stefano Pagliaro, Maria Spinelli, Marco Tommasi from the UdA (Chieti, Italy)

Invited Speakers (online):

- Michael Pluess (Queen Mary University of London)
- Gino Casale (University of Wuppertal)

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- C) Organizational ethical climate and employees' wellbeing (Stefano Pagliaro, UdA)

SLOT 1 - Self-regulation and biological processes

Psychophysiology of self-regulation (Francesca Ferri, UdA) francesca.ferri@unich.it

Self-regulation refers to control over one's emotions and behaviors. Failure of self-regulation may promote several individual and societal problems. Evidence suggests that different factors contribute to self-regulatory capacities. Importantly, self-regulation is literally embodied, as it is reflected in, and affects physiology. More broadly, there is evidence showing that the regulation of peripheral physiological parameters, such as cardiac and respiratory parameters, is intertwined with central regulation of the self. On the other hand, cardiac and respiratory activity impact on the neural processing of internal (bodily) and external (environmental) signals. In other words, self-regulation capacity strongly relies on brain-body interactions and on the coupling between neural and visceral rhythms, which represent the target of a growing number of studies in the emerging field of interoception. Interoception refers to the processing of internal bodily signals and to the representations of the internal states of an organism. Key components of the study of interoception are interoceptive signals, interoceptors, ascending and descending pathways, central interpreters, central integrators, central regulators, and interoceptive effectors. The lecture will present a brief overview of physiological systems involved in self-regulation, reviews the empirical links between self-regulation and physiology in several domains, and then suggests directions for future research. We will specifically focus on the interactions between brain, cardiac and respiratory systems. In a lab session, students will be shown how to collect and analyze interoceptive data (using EEG, ECG and the respiratory belt) by means of objective measures (e.g. heartbeat evoked potentials, heart rate, respiratory rate).

SUGGESTED READINGS

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SLOT 1 - Self-regulation and biological processes

Oxytocin (OXT) and Child Socio-Emotional Development (António J. Santos, ISPA)

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Oxytocin (OXT) has attracted research interest for its potential involvement in many of the behavioural problems observed in childhood. Various studies suggest that already in the first months of life, the Oxytocinergic (OXTergetic) system is: 1) active in human infants; 2) measurable; and 3) reacts to social contact in a predictable way. Moreover, the findings achieved support current theories suggesting that social engagement during the first months of life may be supported by the OXTergetic system, which may drive affiliative and attachment behaviours in early social life. Despite heterogeneity in what aspects of the socio-emotional behaviour were targeted, the studies with children at preschool and school ages also support a positive association of OT with: 1) positive social relationships and engagement both with parents; 2) generosity; and 3) visual attention to social cues. Indeed, salivary OXT was found to be associated with child best-friend social reciprocity, comprising of give-and-receive interactions, adaptation to each other's needs, communications, requests and engagement in shared activity. This result is congruent with research in rhesus monkeys describing an association between central OXT levels at 18 months and the expression of affiliative social behaviour with peers including allo-grooming, sitting in contact, clinging, and touching. Several questions have been asked concerning the nonapeptides' role on youth's social cognitive and affective processing in paediatric neurodevelopmental/neuropsychiatric health and pathology that still need to be explored. We will illustrate such problematics by presenting a recent study of our research group (1, 2). Overall, our findings of preschool children salivary OXT measured after playing with parents showed a stronger pattern of negative correlations with behavioral problems, particularly with depression and opposition scales evaluated by preschool teachers.

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SLOT 2 - Self-regulation and emotional development

Emotion regulation and environmental sensitivity in childhood (Francesca Lionetti, UdA)
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Environmental sensitivity is an individual, temperament trait, capturing differences in the perception, processing and response to stimuli. In the general population, across children, adolescent and adult samples, empirical data suggest that one in around every four person has a high sensitivity to stimuli. Importantly from an emotion-point of view, an increased sensitivity has been reported in association with stronger emotional reactivity in response to emotional stimuli, including positive ones, and to predict more difficulties in regulating emotions when exposed to less than optimal environment. In the current lecture I will introduce the meta-framework of Environmental Sensitivity, and how to investigate sensitivity across the life span. I will describe Environmental Sensitivity associations with emotions and affect and its relevance for the understanding of emotion regulation processes in childhood. I will present longitudinal data from the observation of highly sensitive children from preschool years up to adolescence, and discuss the relevance of the rearing, parenting environment for highly sensitive children emotional development, for better and for worse. Moreover, we will work together with video of infants responding to sensory and emotional stimuli, learning to observe individual differences in emotional reactivity from as early as 3 months of age.

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SLOT 2 - Self-regulation and emotional development

Emotional bio-behavioural synchrony during mother-infant interactions (Maria Spinelli, UdA) maria.spinelli@unich.it

Emotion regulation competence allows children to manage responses to arousal events, in order to behave in the most congruent way with situational demands, promoting social adjustment in different contexts. Emotion regulation origins very early in human life and develops thanks to the interactions between the immature infant and the caregiver. In particular, dyadic synchrony, the mother-infant dynamic matching of individual cues, is considered the core promotor of it. Recent findings described that synchrony between mothers and infants during social interaction occurs not only at a behavioural level, by the match of movements and expressions, but also at a physiological and neural level, all levels concurring to a process of co-regulation. The present contribution aims to provide an overview of the topic by discussing how bio-behavioural dyadic synchrony during mother-infant interactions could be assessed and how its role for emotion regulation development could be evidenced.

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SLOT 2 - Self-regulation and emotional development

Attachment and Emotional Development (Manuela Verissimo, ISPA) mveriss@ispa.pt

The assumption that attachment and emotion were inextricably linked in development was explicit in Bowlby's articulation of attachment theory from early on (e.g., Ainsworth, 1973; Bowlby, 1958, 1969/1982, 1977; Sroufe, 1996). Bowlby noted that the attached child experiences fear, sadness, and anxiety at the departure (or threat of loss) of the attachment figure and joy when reunited with her or him. It is not surprising, then, that attachment researchers have been studying the associations between attachment security and multiple aspects of emotional development for several decades (e.g., Berlin & Cassidy, 2003; Brumariu, 2015; Hesse & Cicchetti, 1982; Thompson, Connell, & Bridges, 1988; Waters, Wippman, & Sroufe, 1979; Zimmerman, 1999). We will discuss the preponderance of studies from the last 20 years or so focused on the role of attachment in the infant/child's knowledge about emotions, and present some of our own results on the topic.

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SLOT 2 - Self-regulation and emotional development

ONLINE INVITED LECTURE

Well-being and regulatory aspects in refugee children living in camps in Lebanon

(Michael Pluess, Queen Mary University of London) m.pluess@qmul.ac.uk

Millions of children across the world are affected by war and displacement. As well as having experienced traumatic war-related events, many refugee children end up living in adverse conditions with little access to basic resources. It is well established that children exposed to war and displacement are at increased risk for the development of mental health problems, including post-traumatic stress disorder, anxiety, depression, and behavioural problems. I will introduce the *Biological Pathways of Risk and Resilience in Syrian Refugee Children* study (BIOPATH), which we conducted over the last few years in order to investigate the complex interplay between psychosocial and biological factors in the development of risk and resilience among a large sample of vulnerable Syrian refugee children living in informal refugee settlements in Lebanon. I will then report findings from our BIOPATH study, including the prevalence and predictors of mental health problems, predictors of resilience, the development of resilience over time, as well as the relationship between war exposure and cortisol measured in hair sample. In addition, I will also present a summary of findings from our recent t-CETA study in Lebanon on phone-delivered psychological therapy. After presenting empirical findings from our studies with Syrian refugee children in Lebanon, I will discuss practical implications of our results.

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SLOT 3 - Self-regulation and learning

Self-regulation and digital learning (Sergio Di Sano, UdA) sergio.disano@unich.it

Adolescence is a particularly delicate phase of development during which a disturbing or excessive use of digital media can compromise subsequent development. Several researches highlight the relationship between the use that adolescents make of digital media and their development as it manifests itself in different areas: physical and mental health, peer relationships, identity development and adult-child relationships. The results of these researches provide important implications for education and school policies, and for the preparation of training programs for teachers and parents, or even directly for students. A first line of research has devoted itself to studying "digital well-being", referring to positive psychology, with the aim of investigating ways and strategies for using digital tools that promote well-being and help prevent the risks associated with hyper-connectivity (such as cognitive overload, techno-stress, academic procrastination and problems in building identity) (Di Sano & D'Elia, 2022). A second line of research investigated changes related to the widespread use of digital learning during the COVID-19 pandemic. In particular, the challenges facing curricular teachers and teachers to support. The obstacles in the use of digital learning occur at different levels: a) students; b) teachers and c) school. Research in this area has highlighted the most important predictors of effective use of digital education, paving the way for more effective interventions (Moritz Börnert et al 2021). In the same line of research, Hačatrjana (2021)) investigated what helped students cope with distance learning during the pandemic and what hindered them. Research results showed that students with greater (self-reported) problem-solving skills perceive less stress from distance learning and the pandemic in general. Much research highlights the importance of self-regulatory processes for digital learning and well-being. A third line of research investigates the effectiveness of programs aimed at promoting student self-regulation processes. o promote these processes, the "Social Emotional Learning" program has proven to be particularly effective. A particularly effective SEL program was carried out in Latvia by Baiba Martinsone (Martinsone, 2016).

SUGGESTED READINGS

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- Hačatrjana, L. (2021). Ability to deal with it: Self-management and problem-solving skills, motivation and routines helped high-school students during the COVID-19 pandemic. *Human, Technologies and Quality of Education*, 125.
- Martinsone, B. (2016). Social Emotional Learning: Implementation of Sustainability-Oriented Program in Latvia. *Journal of Teacher Education for Sustainability*, 18(1), 57-68.

SLOT 3 - Self-regulation and learning

Social Emotional Learning: Evidence-based Approaches to Developing of Self-Regulation (Baiba Martinsone, University of Latvia) baiba.martinsone@lu.lv

This lecture will be devoted to the role of Social emotional learning (SEL) in developing skills, necessary for effective learning. Theoretical and empirical background will be provided, as well as specific examples how to develop particular skills in educational settings. The main focus will be on developing of students' self-regulation.

Regarding the definition of the concept of social emotional learning, different conceptual models of social emotional skills are applied. Those are 21st – century skills, soft skills, noncognitive skills, character development, and others (Calhoun et al., 2020).

The five domains of social emotional skills are self-awareness, self-management, social awareness, relationship skills and responsible decision making. The domain of self-management includes effective regulation of emotions, thoughts, and behaviours in different (also challenging) situations. This includes the capacities to delay gratification, manage stress, and feel motivation and agency to accomplish personal and collective goals (casel.org). Within the SEL framework, self-regulation-related skills will be discussed in comparison to executive skills, necessary for goal-directed behaviours.

Research shows that social emotional skills can be taught in schools like other skills, children learn. There are two ways, how schools can integrate SEL in their curriculum. The direct SEL means implementation of evidence-based SEL programs; however, they are criticised as expensive, problematic in fidelity of implementation, and requesting additional teachers' training. Research shows that SEL can be provided also indirectly through united structure of a lesson, applying teaching strategies, positive and specific feedback. Another approach to SEL is eliciting and teaching the core components of SEL (one of them is self-regulation) through deconstructing of evidence-based programs (EASEL lab in Harvard University).

Recent studies on the role of social emotional skills in learning (both in process and outcomes) will be discussed.

SUGGESTED READINGS

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<https://hundred.org/en/innovations/sel-kernels-of-practice>
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SLOT 3 - Self-regulation and learning

ONLINE INVITED LECTURE

Promotion of self-regulation in students with special needs through digital learning (Gino Casale, University of Wuppertal) gcasale@uni-wuppertal.de

Students with special needs in learning and social-emotional development exhibit considerable problems in self-regulation processes (e.g., Grigorenko et al. 2020; Nelson et al. 2004). While digital learning, on the one hand, places high demands on students regarding self-regulation, it provides on the other hand good opportunities to effectively promote student's self-regulation skills (Azevedo, 2005; Börnert-Ringleb et al., 2021; Bradley, Browne & Kelley, 2017). There is evidence that digital and ICT-based forms of teaching and learning can promote the self-regulation of students and that children and young people with learning and social-emotional skills needs in particular can benefit from them. The workshop will provide a theoretical and conceptual introduction to digital learning, self-regulation and students with special needs in learning and social-emotional development. Afterwards, the current evidence base for the support of students with special needs and their self-regulation in digital learning will be presented. Concrete methods will be presented and discussed.

Key word: self-regulation, digital learning, learning difficulties, emotional and behavioral difficulties, social emotional development

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SLOT 3 - Self-regulation and learning

ONLINE LECTURE

Self-regulation, physical settings and routines to work and rest effectively: lessons learned from distance learning during the pandemic (Liena Hačatrjana, University of Latvia) liena.hacatrjana@lu.lv

The lecture will give a brief insight into theories of self-directed learning (also called as self-regulated learning) and particularly *self-management* as a crucial part of the broader concept of self-regulated learning. Self-management as a skill of students became increasingly important during the COVID-19 pandemic when many schools in many countries of the world switched to learning distantly. This new experience demanded that students had to plan and organize their daily learning much more. The question is: were their abilities and skills enough to deal with distance learning and what routines did the students develop that helped them?

According to the model by Garrison (1997), self-management and self-organization are important parts of self-regulated learning, and they relate to how all the activities and actions associated with learning are carried out and controlled, such as how all the necessary resources are managed and allocated. In her research during the distance learning L.Hačatrjana defined self-management skills as a set of skills and habits necessary to (1) successfully organize one's tasks, time and resources and (2) be able to understand conceptually and clearly what has to be done in a certain period of time (for example, in a period of one day or a week) and why it has to be done (motivational aspect). During the lecture, the researcher will also present the insights from the research during the pandemic with high-school students in Latvia, including their experiences of the need for the physical settings that usually gives a sense of order and routine to get motivated for work (for example, the physical classroom setting).

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SLOT 4 - Self-regulation, personality and social-cognitive processes

Personality factors, locus of control and emotional regulation (Marco Tommasi, UdA)

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Emotional regulation is an important factor for psychological well-being (PWB). In particular, PWB is associated with a reduced level of negative emotions and an increased level of positive emotions (Ryan & Deci, 2001). Therefore, the ability to regulate emotion is fundamental to increase the level of PWB.

Emotions are determined by life circumstances and/or by internal mental representations (Cacioppo et al., 2000) and determine changes in multiple response systems (e.g. experiential, behavioral, peripheral physiological; Cacioppo et al., 2000). Impairments in emotion regulation can cause socially maladaptive and self-destructive behaviors (Gross, 2002; Gross & Munoz, 1995). Emotion regulation is also an important topic for clinical psychology, because many psychological syndromes (e.g.: Post-Traumatic Stress, Anxiety disorder, Major Depression, Schizophrenia) are characterized by the difficulty of clinical subjects to control the intensity and expression of their inner feelings and impulses (Davidson, 2000; Kalin & Shelton, 2003; Phillips et al., 2003). Emotion regulation should be studied not only in clinical subjects, but also in normal subjects to define the variation and change of the basic functional architecture for the cognitive control of emotion. Therefore, individual differences should be assessed to determine the connection between their variation with the capacity to regulate emotions (Hamann & Canli, 2004; Ochsner & Gross, 2005). Personality factors are individual characteristics that can moderate the impact of life circumstances or mental states on emotive states (DeNeve, 1999; Hamann & Canli, 2004). In addition, locus of control, which is an individual characteristic, has an important role in emotion regulation (DeNeve & Cooper, 1998).

Studies found significant connections between personality factors, locus of control and emotion regulation in relation to PWB (Ryff, 1989;). Studies also showed that emotion regulation is connected to the activity of Prefrontal Cortex (PFC), in particular lateral and dorsal medial PFC, Orbitofrontal Cortex (OFC) and Anterior Cingulate Cortex (ACC) (Botvinick, 2004; D'Esposito et al., 2000). Network models of emotion regulation that include individual characteristics as personality factors and locus of control not only allow to create models of psychological networks of latent psychological variables, but also they can be used to verify the existence of such networks at a neurological level (Ochsner, 2006). In relation to peripheral nervous system, research showed an important relation between the activity of cardiac vagal control and emotion regulation favoring, in this way, a probable use of cardiac vagal tone as marker of emotion regulation capacity (Balzarotti et al., 2017).

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SLOT 4 - Self-regulation, personality and social-cognitive processes

Decision-making, temporal discounting and well-being (Giorgia Committeri, UdA)

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Daily decisions often involve a tradeoff between the chance of earning a smaller but immediate reward or a larger but delayed reward. In such types of choices, in which gains are evaluated against time, future outcomes are typically devaluated as a function of the delay. This phenomenon, known as delay- or temporal discounting (TD) represents a relatively stable and highly idiosyncratic function. Given its pervasiveness in daily life decision scenarios and its relevance for adaptive behavior, TD has been massively studied across several fields of investigation including economic, psychology, psychiatry, and neuroscience. They found that a variety of sub-optimal life outcomes, as well as a wide range of psychiatric conditions (e.g. addiction, ADHD, depression, eating disorders) are associated with an abnormal TD. The lecture will address the topic through the presentation of a series of experimental studies conducted by means of the process-tracing method of mouse kinematics, that has been shown to reliably measure cognitive processing underlying decision formation with a fine-graded spatial and temporal resolution. We will see that mouse kinematics measures can predict discounting functions (farsighted vs. discounter) in healthy subjects and gamblers, that there are specific neural markers by resting-state functional connectivity (rsFC), and that TD can be reduced by different behavioral manipulations. In the associated practical session, students will have the possibility to participate to an experiment on intertemporal choice and to familiarize with the main data analysis steps.

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SLOT 4 - Self-regulation, personality and social-cognitive processes

On the effects of ethical climate(s) on employees' reactions: A social identity approach
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Ethical work climate represents a set of shared formal and informal perceptions of procedures and policies, which shape expectations for ethical behavior. Thus, it seems crucial for organizations to understand the positive and negative consequences of different kinds of ethical climates in order (a) to avoid the associated financial and sociopsychological costs and (b) to rely on those climates that, on the contrary, may increase employees' positive relationship with the organization, positive behaviors, as well as wellbeing. In recent years, researchers as well as practitioners have focused their attention on this construct, considering its direct influence both on individual and organizational outcomes and behaviors. In this talk, I will present evidence from a research project in which we compared the effects of a more individualistic and independent vs. collectivistic and interdependent ethical climate on employees' reactions (i.e., attitudes, behavioral intentions, wellbeing), across a range of cross-sectional and experimental studies, conducted both with in real contexts and in the lab. We thus attempted to understand how different types of ethical climates predict employees' (positive and negative) attitudes and behaviors: In doing so, we relied on the social identity approach to suggest that the effects of (different) ethical climates on employees' attitudes and behavioral tendencies are driven by identification with the organization. Evidence showed that a collectivistic and interdependent ethical climate promotes pro-organizational behavior and well-being, while discouraging counter-productive work behaviours, and in this way, it helps building a trustworthy organizational atmosphere. Across the studies, organizational identification emerged as a fundamental underlying mechanism driving the effects of ethical climates on employees' reactions. Results are discussed in terms of their relevance for Human Resources Management policies as well as in terms of their impact on both the individual and the organizational well-being.

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