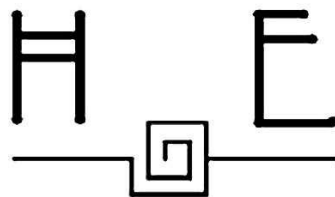


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## EXPLORATORY STUDY OF FRIENDSHIP AND WELL-BEING AMONG BRAZILIAN TWIN CHILDREN

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### ABSTRACT

*Few studies have examined friendships among twins. This is the first study in Brazil and is part of the Painel USP de Gêmeos. A previous study conducted with British twins in childhood has shown that the number of friends did not vary, but MZ shared more friends than DZ (MZ>DZss>DZos). Our aim was to compare the number of friends and the proportion of friends in common among monozygotic (MZ), same-sex (DZss) and opposite-sex (DZos) dizygotic twins, and to investigate the association with their well-being. Eighteen pairs of Brazilian twins aged 8-14 (MZ=8; DZss=6; DZos=4) represented their friendship network on the Pictorial Representation of Friends and answered a 5-item Well-Being Scale validated in Brazil. Non-parametric Kruskal Wallis tests were used. Additional pairwise comparisons were conducted using the Mann-Whitney test with Bonferroni correction and showed that common friends ( $\chi(2)^2=9.078$ ;  $p=0.011$ ) and proportion of friends ( $\chi(2)^2=9.143$ ;  $p=0.010$ ) was lower in the DZso group relative to both the MZ and DZss. The comparison of number of friends and well-being showed no significant effects. Our research is in line with previous studies suggesting that similar individuals are likely to have a considerable overlap of friends, whereas opposite-sex twin pairs have separate social groups. The results may contribute in the fields of psychology and education to deepen the understanding of the specificities of the twin relationship and the practical implications on its insertion in the school context.*

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## SENSE OF BEAUTY AND AESTHETIC PREDISPOSITION IN EVOLUTIONARY AESTHETICS

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### ABSTRACT

*Evolutionary aesthetics (EA) stands to benefit from a refined conceptual framework. By drawing attention to the case study of secondary sexual characters, I aim to reestablish Charles Darwin's account of sense of beauty as a legitimate concept of evolutionary and philosophical research, to connect this account with the work of Ellen Dissanayake on aesthetic predispositions, and to show how this synthesis of Darwin and Dissanayake will contribute to debates in EA. Indeed, I argue that Darwin's account fruitfully identifies the characteristics, both ornamental and behavioural, that are the best candidates for EA explanation. I provide a framework for characterising these; first, there is a formal level, expressed in the display of recurrent transpecific geometrical patterns and rhythmical repetition of movements and sounds. Second, a (proto-)emotional or 'felt' level, expressed in the association of sensations of pleasure with specific perceptive patterns. Of this second level, Darwin could not achieve an adequate and physiologically focused account. To complete his wish, I argue that Dissanayake's work fits the bill. Using recent discoveries in ethology and neuroaesthetics, Dissanayake studies the development of innate aesthetic predispositions in humans—these give rise to processes of 'artification'—and she shares with Darwin the idea that these predispositions are grounded in formal patterns, emotional reactions and affective states that are common to different species. Finally, I shall conclude by indicating prospects for future research, including identifying the phenotypes able to induce pleasure and attraction in individuals and linking them to the broader EA discussion.*

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## TAKING CHOICES OFF PAPER: SPEED-DATING AS A METHOD FOR COLLECTING DATA ON PARTNER CHOICES

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### ABSTRACT

*Choices of romantic partnerships have traditionally been studied using self-report instruments, which could limit their ecological validity. In this sense, the use of a method closer to real decisions is welcome, such as carrying out interactions through speed-dating, a situation of quick sequential interactions between several people, presented as potential partners. Our aim is to describe such a method as a tool to evaluate partner choice. For speed-dating, we recommend the use of disposable lab coats and shoe protectors in order to control status variables, as well as tied hair and absence of makeup, to control attractiveness variables. Interaction between participants should take place with them sitting in front of another participant, lasting 3 minutes, so that each one can interact with the others. At the end, a choice of a partner for long-term and another for short-term romantic relationship is proposed. In case of a match in the choice, contacts can be provided (previously informed to participants). It is important to use instruments regarding self-assessment such as a romantic partner, self-esteem, and personality, in order to identify the motivations for the choices. This method, unlike self-report instruments, allows an observation of the choice of partner in a way that is more similar to the natural environment, with several competitors and potential partners within the same context, characterizing a real choice, and not just an idealized one.*

*Keywords: sexual behavior, partner choice, speed-dating*

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## NARCISSISTIC TRAITS, AGE, INDIVIDUAL CULTURE, AND MACHISMO

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### ABSTRACT

*Comparing narcissistic traits across cultures is rarely done. Furthermore, previous studies have not observed the relationship between narcissistic traits and the ideology of machismo. Both narcissistic traits and machismo play a notable factor in an individual's mindset and behaviors, such as adverse childhood experiences, unproductive work behavior, beliefs towards rape, and lack of empathy towards rape victims. Therefore, these two factors may combine to produce potentially morally negative future implications. Based on previous research on these topics, it is predicted that narcissistic traits are associated with high machismo ideology, older individuals will have higher scores of narcissistic traits and machismo value than younger individuals. The number of participants will be at a nonproportional level of 30 participants per culture (i.e., Latino, Middle Eastern, Asian, European, and North American) The participants will take a personality questionnaire, and a machismo measure inventory. After that, there will be a narcissistic traits questionnaire, using the narcissistic traits scale, that will be summed up as specific scenarios of narcissism and how the participant reacts to that scenario. There will be counterbalancing between machismo and the narcissistic traits questionnaire. This will help predict an association between cultural differences in narcissistic traits as well as build an association between machismo and narcissistic traits. Furthermore, it will predict if age is a factor of high levels of narcissistic traits and machismo. These findings will be discussed as part of the larger literature on factors affecting social policies across cultures.*

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## DIFFERENT TYPES OF HOMOSEXUALITY TESTED THROUGH DIFFERENT BIOMARKERS AND PSYCHO-SOCIO-SEXUAL ASPECTS

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### ABSTRACT

*Sexuality is a central aspect of human behavior. Previous studies suggest that male homosexuality might be a heterogeneous phenomenon and that different types of homosexuality are linked to distinct bio developmental pathways. Supposedly, different groups of homosexual men can also differ in their behavioral and psychological characteristics. This study aims to analyze possible differences in psychosexual traits among gay subcultures. So far, we have collected quantitative self-report data (through a battery of online questionnaires) from 921 participants, most of them gay men. Gay participants reported if they belonged to the following subcultures: Bears, Twinks, Drag Queens, Geeks/Gaymers, Activists, Alternatives, Leathermen, BDSM practitioners, Daddies, Suburbans, and Clubbers; and responded measures of behavioral and sexual variables, including childhood gender nonconformity, masculinity/femininity, self-esteem, sexual anal role preference (i.e., top, bottom, versatile), and sociosexuality. Generalized linear models analyzing possible differences in psychosexual characteristics did not reveal any significant difference among the subcultures. Future prospects of this study include 1) the collection of qualitative data (through interviews), in order to better map the gay subcultures in Brazil, 2) the profiling of possible subgroups of homosexual men based on distinct developmental biomarkers (birth order, familiarity, handedness) through Latent Profile Analysis (LPA) and 3) the possible links between these profiles and the aforementioned sexual and behavioral variables. We believe this research project has the potential to shed new light upon the biological basis of human sexual orientation, as well as psychological and social aspects of human sexual behavior.*

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## FACIAL EXPRESSIVITY AND FRIENDSHIP FORMATION DURING ONLINE SOCIAL INTERACTIONS

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### **ABSTRACT**

*Facial expressions are an integral part of interpersonal communication. Facial expressions can display our internal states, change in response to the actions of others and influence others' perceptions and behavioural tendencies. Therefore, facial expressivity has the potential to impact first impressions and friendship formation. The current study aimed to explore the influence of facial expressivity and the understanding of display rules of emotions in the formation of first impressions and interpersonal connections in an informal, online group setting. Participants (N = 256) met in groups of four or three to test the hypothesis that more expressive individuals are more likeable and form better first impressions. We predicted that individuals displaying higher overall expressivity will be perceived more favourably by others during first encounters (H1). Further, we expected that higher overall facial expressivity will be associated with having bigger and more densely connected social networks in real life (H2). Following research reporting that greater understanding of display rules for both positive and negative emotions links with better social outcomes, we expected that individuals who have more precise perception of display rules to be rated as more popular by their group members (H3). The findings of this study will be discussed in relation to their implications for how individuals engage with professional and personal social interactions in both online and face-to-face settings.*

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## DO GAY MEN FROM VARIOUS SUBCULTURES DIFFER IN THEIR PERCEPTION OF OWN APPEARANCE?

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### ABSTRACT

*Gay men are believed to be under higher social pressure than heterosexual men regarding their physical appearance. The literature suggests that some gay subcultures create their own body ideal, which could enable them to maintain a more positive relation towards their bodies. However, there is a lack of data to answer whether and how gay men's relation to their bodies differs across various subcultural appearance identifications. We sought to explore this question in a sample of cis gay men (n = 1,625, aged 18-50), who reported their identification with familiar gay subcultures and rated their overall attractiveness on a 1-10 scale, and their body dissatisfaction on MBSRQ - Appearance Evaluation subscale (Cash et al., 2004). We then selected the most frequently reported subcultures for the analysis (Twinks, Bears, Geeks, Jocks).*

*In an exploratory analysis, we separately regressed self-rated attractiveness and body dissatisfaction on gay subculture identification. The analysis revealed that identification with the Jocks subculture has a positive effect on both self-rated attractiveness and body satisfaction (after controlling for BMI, age, education and size of domicile). Other differences between subgroups in both self-rated attractiveness and body dissatisfaction were only confounders of BMI. In most instances, identification with certain gay subcultures did not have a significant effect on either self-rated attractiveness or body dissatisfaction. This result was rather surprising given that the gay subcultures we explored are associated with certain body types. Further research is needed to explore whether and how gay subculture identification might be relevant to self-appraisal of appearance.*

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# WHY ART MOVES US – AN ANALYSIS OF PHYSIOLOGICAL RESPONSES TO ART

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## ABSTRACT

*The human experience of reality is shaped through the perception of their surroundings. As our brains evolved to filter information, we have developed preferences for certain stimuli, shapes and contrasts that were relevant in our evolutionary history. Recent studies have shown that artwork can have positive impacts on psychological and physiological wellbeing.*

*In this project we take a closer look at the characteristics of artworks and investigate what qualities of artworks lead to a perceived and physiological increase in wellbeing. The qualities to be investigated are the self-relevance of an artwork, based on the theme depicted, and its beauty, shown in the level of skill and the artistic style of a piece. We expect that both qualities are linked to a decrease in stress markers, both physiological and questionnaire-based.*

*Based on a pre-study (N=85 participants), themes of relevance/irrelevance were identified and selected to be depicted in artworks. Artworks were consequently created using the open access AI platform Dalle.2 for the categories “beautiful & relevant” and “neither beautiful nor relevant”. In a between subject laboratory study, participants will be confronted to five artworks per category for 180 seconds and physiological parameters (heart rate, heart rate variability, skin conductance and temperature) will be measured before, during and after each exposure. The subjective experience based on questionnaires will serve as control variable.*

*This study aims to disentangle the dimensions personal relevance and aesthetic quality in artworks and contributes to a better understanding of what about art moves us.*

*This research is funded by WWTF ESR20-034 and Talente: FFG FemTech Praktika für Studentinnen 2023 49651874, 2023 49651751 and 2023 44347304.*

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## UNLOCKING INSIGHTS: THE POWER OF BIG DATA IN UNDERSTANDING HUMAN BEHAVIOR

**Valdir Moura Brito-Junior<sup>1,2</sup>, Ulysses Paulino Albuquerque<sup>1</sup>, Anibal Silva Cantalice<sup>1,2</sup>, Edwine Soares Oliveira<sup>1,2</sup>, Joelson Moreno Brito Moura<sup>3</sup>, Rayane Karoline Silva Santos<sup>1,2</sup>, Risoneide Henriques Silva<sup>1</sup>, Washington Soares Ferreira-Junior<sup>4</sup>**

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### ABSTRACT

*Every day, millions of people browse the internet, seeking information and engaging on social networks. These activities generate an enormous amount of digital data that can be utilized in various fields of knowledge through big data techniques. With this information, valuable insights and innovative discoveries can be extracted to address the challenges of the modern world and answer important scientific questions. From this dataset, human behavior can be analyzed on a large scale, reaching audiences that would otherwise be inaccessible. In this study, we propose the culturomics of human behavior (CHB), an approach that aims to understand, explain, and predict human behavior using large sets of digital data. This approach offers a unique perspective on human nature, enabling us to explore behavior in different contexts and with different cultural perspectives. The CHB represents a new frontier in comprehending the human mind and behavior, with the potential to expand our understanding of how people think, act, and interact in different cultural contexts. Furthermore, the CHB allows us to examine the phenomenon from the perspectives of various disciplines.*

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# ABOUT “UNIQUENESS” PRINCIPLE OF THE ‘SOCIAL INDICATORS’; THEIR SEMANTIC ARCHITECTURE; A RELATED EXPLICATIVE FRACTAL MODEL

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## ABSTRACT

*There are systemic and operative criteria within the proceeding of the ‘Social Indicators’ in stimulating (re-)actions, actively improving society’s state, and reception of feed-backs [tasks of enlarged societal management].*

*All these features of the systemic and operative criteria within the complexity of ‘Social Indicators’ would take an advance, if a “uniqueness” principle of the ‘Social Indicators’ usage would prevail.*

*Let us introduce the following e.g. of the ‘National Energetic Systems’ [as complex human-machine entities] within a ‘Central Dispatcher’ controlling all this dynamically huge structure by (ONLY) a unique indicator: the frequency of the electric current through the entire-system.*

*Let us prompt the usefulness of a unique welfare/poverty indicator as ‘the number of eggs bought by an individual per month’.*

*Then, let us comprehend the foreseen social usage of this unique welfare/poverty indicator – comparing with the multi-set indicators (mostly related to the ‘daily basket of strictly necessary products for living’).*

*All these could step-by-step (re-)introduce the “uniqueness” principle of the ‘social indicators’ usage – ‘pros’ and ‘cons’, by stately case studies based on the systemic and operative criteria.*

*IF a step-by-step (re-)introduction of the respective “uniqueness” principle of the ‘social indicators’ usage would be positively resulting through the considered ‘simpler’ case studies, THEN a more complex set of case studies would be possible focused.*

*Why not, considering the explicative necessities, to (re-)address so (unique-indicatorially):*

*-Conceptualizing their Semantic Architecture (Bateson, 1972): ‘Ecology of Mind’.*

*-A related explicative Fractal Model (Miriță, 2006): neurodynamic stands on “uniqueness” principle...*

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## MUSIC LISTENING INFLUENCES PERSON PERCEPTION TOWARDS MUSICIANS AND NON-MUSICIANS: EVIDENCE FOR SOCIAL AND SEXUAL SELECTION

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### **ABSTRACT**

*Musical performance is a costly display that honestly indicated individual's qualities and can be used as a self-promotion tactic. Social and sexual selection predict that musical displays would indicate individual's qualities and manipulate the person perception of others. We experimentally investigated music listening effects on person perception towards individuals directly and indirectly related to musical performance. Participants were 140 women, 60 men divided in: 1) no music and evaluated traits of the imagined designers of the portable stereo radio; 2) listened to music and evaluated traits of the imagined designers of the portable stereo radio; 3) listened to music and evaluated traits of the imagined musicians. The musical piece was instrumental, little known. Participants evaluated the music and imagined persons, reported their own musicality. Musical evaluation did not differ between sexes. Women appreciated more music than men. Compared to no music-listening, music-listening positively influenced women's perception of the designers. This effect was higher (both sexes) when the musicians were imagined. Music-listening influenced more women's person perception, probably due to females' higher mate selectivity of males, being more sensitive/judgmental to men's phenotype/behavior. Our results corroborated in a Brazilian sample similar findings from a European sample. The positive effects of music-listening on person perception towards individuals indirectly and directly related to musical performance supports both social and sexual selection hypotheses about the evolution of human musicality. These conclusions make social and sexual selection promising fields for future empirical research about adaptive functions of human musicality.*

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## THE ONTOGENY OF SEXUAL BEHAVIOR IN WILD JUVENILE CAPUCHIN MONKEYS

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### ABSTRACT

*The complexity of animal sexual behavior is still poorly understood, often being reduced to its distal reproductive function. However, there is evidence of a vast repertoire of non-conceptive sexual behavior in many species, including human and non-human primates, denoting social or even hedonic (proximal) functions of sex. Darwin recognized the value of sexual selection, which may lead to evolution of seemingly deleterious traits, as an equivalent mechanism to natural selection for explaining the evolution of characters. This project proposes to investigate the early development of sexuality on *Sapajus libidinosus*, a neotropical species of wild capuchin monkey, under the perspective of the social learning of sexual behavior hypothesis. For that purpose, we will analyze the sexual behavior contained in video records, previously collected by the "focal-animal" method. Frequencies and durations of the sexual behavior of 5 females and 5 males (between 18-36 months, covering two breeding seasons) will be transcribed, in order to evaluate if they change through time. Behavioral transcriptions will be performed with a specific software, The Observer XT, by using a previously determined ethogram. We expect that less proficient sexual behaviors will be gradually replaced by more effective, adult-like behaviors. Inter- and intra-individual comparisons will be performed to understand differential acquisition of sexual patterns at certain sex/age classes, and to assess preferred partners and contexts in and off breeding season. Our results will be further compared with other studies on primate sexuality, enhancing the knowledge about ontogeny and diversity of animal sexual behavior as a whole.*

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## **RELATIONSHIP BETWEEN SEXUAL SATISFACTION, LOVE SATISFACTION, AND THE DARK TRIAD AMONG YOUNG COUPLES: AN EVOLUTIONARY PERSPECTIVE**

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### **ABSTRACT**

*Compared to romantic satisfaction, sexual satisfaction has been far less theorized and investigated in evolutionary studies. Accordingly, this study aimed to investigate the relationship between sexual satisfaction, romantic satisfaction and the Dark Triad (DT). We expected that both romantic satisfaction and DT would be predictors of sexual satisfaction. Additionally, we expected that love satisfaction would be associated with sexual satisfaction. The sample consisted of 72 young adult heterosexual couples. Participants answered an online platform in which they responded to the Love Scale, Dark Triad Dirty Dozen, and one item for sexual satisfaction. Women's sexual satisfaction was predicted by theirs and their partners' levels of love but not for their partners' sexual satisfaction or DT domains. Men's sexual satisfaction was predicted by their level of love, their partners' sexual satisfaction, but not by their partners' love or DT domains. The association between sexual and love satisfaction corroborates the studies that demonstrate that these two aspects of human relationships reinforce each other in the history of the species. We discuss these results in light of the literature, the limitations of the study, and the non significant results of the DT on sexual satisfaction.*

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## NONVERBAL EMOTIONAL BEHAVIORS ASSOCIATED TO JEALOUSY IN ROMANTIC COUPLES

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### ABSTRACT

*Human emotions have an adaptive origin that has been evidenced elsewhere, however, it has not been integrated into the study of more complex emotional displays that are based on affective phenomena, such as romantic jealousy. Jealousy is a recurring affect when it comes to researching interpersonal relationships and it can manifest itself in various ways, probably including facial microexpressions. Predictions about the function of jealousy are studied, carrying out an experimental design with couples targeting their micro-expressions evoked by situations of social rivalry through the imaginary of a real jealousy evoking rivalry episode . It is expected that the situation of social rivalry of a same sex partner's best friend will evoke pain (markedly in females) and anger (mostly in the men). It is proposed that jealousy is associated with an increased frequency and duration of negative facial microexpressions in contrast to positive microexpressions. A total of 24 heterosexual dating couples participated in the research. The result, will allow us to generate knowledge about the non-verbal expression of jealousy in an experimental setting in the laboratory, being the first attempt to capture microexpressions of jealousy in couples.*

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# THE WEIGHT OF SMELL: THE ENDOCRINE CHANGES OF OBESITY AND THEIR POSSIBLE IMPLICATIONS FOR THE OLFACTORY PERCEPTION OF ROMANTIC PARTNERS

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## ABSTRACT

*Sexuality involves physical, biological, and emotional aspects, and a set of complex and varied behaviors in the search for pleasure, love, and interpersonal relationships. Due to its complexity, it can be influenced by different factors, such as diseases. Among the diseases that can interfere in sexuality, obesity has received a lot of attention, because the higher the BMI, the lower the sensitivity to smell, as well as the higher the insulin resistance and glucose levels, closely related to the olfactory capacity. Knowing that among the usual characteristics in partner choice is the olfactory perception of body odors, and that obesity changes affect this perceptual sieve, how much does this affect the discriminatory ability of body odors? We then propose to use indirect measures such as assessment of glucose levels, as well as body odor discrimination experiment to answer this and other questions. In addition, we will analyze the impact of bariatric surgery on the improvement of olfactory capabilities to body odors. Thus, in general terms, we seek evidence to demonstrate that changes in the olfactory abilities of obese individuals extend to attractive perceptions of human sexuality. We hope that the results collected here will show that obesity, high glycemic index, and insulin resistance affect the ability to discriminate body odors, and that weight loss and/or bariatric surgery can reverse this situation, bringing results beyond the metabolic improvements notoriously observed in post-surgical patients.*

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## STATUS AND ENVIRONMENTAL UNPREDICTABILITY: HOW THESE FACTORS RELATE TO OUR CAREER CHOICE

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### ABSTRACT

*The life history theory argues that individuals need to allocate their resources throughout development. Several factors can influence this resources allocation, including environmental unpredictability. In humans, especially during childhood, the unpredictability experienced in the family environment influences individual adult's behavior, impacting various decision-making processes such as the time invested in education and career choice. This study investigated whether the environmental unpredictability experienced in childhood is related to chosen undergraduate's course status. To do so, 74 high school students (42 women) completed a sociodemographic questionnaire, evaluated preferred undergraduate course status for admission through the Subjective Social Status Ladder, and indicated the care scarcity, financial, and food resources level experienced in childhood through the Childhood Familiar Unpredictability Scale. The results indicated that young people who grew up in environments with more family care desire to enroll in courses with higher levels of social status. This work suggests that the environmental conditions experienced in childhood influence decision-making in adult life, as in predictable environments, it is more advantageous to invest in embodied capital - intellectual abilities accumulation, physical characteristics, valuable competencies - to acquire status and increase their mating value, and only later invest in reproduction. However, further studies are necessary to expand these results and verify whether students are able to enroll and complete the intended course, as well as whether the degree has an influence on increasing individual social status.*

*Keywords: diploma, family care, fundamental motives, decision making*

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## PSYCHOPATHY AND PORNOGRAPHY CONSUMPTION PATTERNS

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### ABSTRACT

Subclinical psychopathy (characterized by antisocial and self-interested orientations and callousness) is not necessarily harmful to the focal individual and may be evolutionary adaptive. This trait cluster within the fast life-history profile and is related to short-term mating strategies in humans. Recently, evolutionary scholars found that psychopathy is positively related to variables associated with short-term mating strategies: pornography craving, high sexual arousal as reason for pornography consumption, and “deviant” pornography consumption, most consistently in males. **Objectives:** We plan to test a model whereupon psychopathy predicts i) “deviant” pornography consumption, ii) high sexual arousal as reasons for pornography consumption and iii) pornography craving. **Method:** We plan to use the Short Dark Triad, the Reasons for Consumption of Pornography, the Pornography Craving Questionnaire and the Consumption of Deviant Pornography as part of an online questionnaire. We aim to test this model with structural equation modeling. Further, we will test the adequacy of this model for both sexes through invariance analyses. Finally, we aim to adapt the Reasons for Consumption of Pornography Scale, the Pornography Craving Questionnaire and the Consumption of Deviant Pornography to the Brazilian context via confirmatory factor analyses. **Expected results:** We hypothesize that psychopathy will predict all the variables, although the model may be inadequate for females. Our contribution to the literature lies in the utilization of a non-WEIRD sample and the discovery of supplementary evidence linking sociosexual traits to psychopathy.

**Keywords:** dark triad; life-history, sociosexuality; individual differences; evolutionary psychology

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# GENDER ORIENTATION ON MEASURE: VALIDITY EVIDENCE OF AN INSTRUMENT

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## ABSTRACT

*Gender orientation refers to how individuals define themselves based on the gender roles they perceive themselves to adopt. These definitions can range from extreme agreement with their biological sex to extreme disagreement with it. Gender orientation can be viewed as a personality trait with adaptive value, as it allows individuals to better adapt to their social environment and navigate the complex social dynamics of gender roles. This study aimed to construct an instrument to measure gender orientation and seek its validity evidence, and reliability indicators. A total of 794 adults from all regions of Brazil completed the 18-item Gender Orientation Scale (GOS) and other psychological instruments. Exploratory and confirmatory factor analyses showed an adequate two-factor structure for gender orientation with satisfactory reliability indices. One factor, named Typified, describes the proximity to perceived typical roles of the biological sex, and the other, named Mixed, describes the proximity to both sexes' perceived typical roles. As expected, correlations were found with sex roles, such that for men, the higher the scores in Typified, the more masculine they were, and for women, the higher the scores in Typified, the more feminine they were. Negative correlations were also found between the Typified factor and the Sociosexuality factors for women. The Mixed factor positively correlated with Attachment-related anxiety for men and negatively correlated with the Agreeableness Big5 factor for women. The instrument showed satisfactory validity evidence and can be used in future studies and in other contexts, such as clinical psychology.*

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## **MANATEE-WATCHING: HUMAN BEHAVIOURS TOWARDS ANTILLEAN MANATEES, *TRICHECHUS MANATUS MANATUS*, IN BRAZIL**

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### **ABSTRACT**

*Marine mammal watching is a tourist attraction worldwide. However, no data in Brazil is available for such activities related to Endangered Antillean manatees (*Trichechus manatus manatus*). To understand human behaviour during manatee-watching in Brazil, we assessed the interactions between tourists and Antillean manatees using the Instagram platform as a data source. Antillean manatees are charismatic animals, often appearing on social media when people encounter them in the wild. We detected 16 tourist-manatee interactions and categorized them into major and minor disruptions. Major disruptions included interactions prohibited by Brazilian law, often involving physical contact between tourists and manatees (e.g., touching the manatee, swimming with the manatee, kissing, feeding, provide water to the animal). Minor disturbances included interactions with no direct physical contact, which is not prohibited by Brazilian law. Although minor disruptions were significantly more frequent than major disruptions, the simple existence of the latter reveals the lack of compliance with Brazilian regulations. Current human behaviours towards wild manatees in Brazil could increase risks of diseases and behavioural changes in the manatees. Instagram images provided valuable data regarding tourist-manatee interactions, reinforcing the utility of social media in quantifying viewing pressure. Tourism management strategies should have strict regulations for manatee-watching and focus on reinforcing compliance with regulations, preferably involving the locals to warrant the sustainability of this practice in Brazil.*

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## SEXUAL ATTRACTIVENESS ON MEASURE: VALIDITY EVIDENCE OF AN INSTRUMENT

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### ABSTRACT

*Understanding individual differences related to sexuality is crucial, as these characteristics have been shown to substantially contribute to the explanation of various psychological phenomena, particularly those pertaining to reproductive behavior. Efforts to incorporate these markers of individual variation into studies of personality have resulted in the sexy-seven model, comprising seven factors of sexuality. One of the dimensions of this model is sexual attractiveness, reflecting how much an individual elicits sexual interest in others through their physical beauty and seductive behavior. Sexual attractiveness has been shown to impact self-esteem, romantic relationship success, and even professional achievement. The present study presents a Scale of Sexual Attractiveness (SSA) and validity evidence based on the sexy-seven model. A sample of 758 Brazilians (65.8% women) completed the scale and other psychological instruments. Exploratory and confirmatory factor analyses resulted in a structure of 14 items divided into two dimensions (Beauty and Seduction), with satisfactory psychometric properties. Women scored higher on the Beauty factor, while men scored higher on the Seduction factor. In women, there was a correlation between Beauty and self-esteem, and body mass index. The importance of Beauty (physical appearance) for women and Seduction for men is discussed from an evolutionary perspective.*

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# IS MOTIVATION ENOUGH? THE EFFECT OF LISTENING TO FAVOURITE MUSIC WHILE STUDYING ON THE LEARNING OUTCOME: A STUDY PROPOSAL

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## ABSTRACT

*Music is practically omnipresent in the everyday lives of university students. Especially in large cities one cannot really escape it. In every café, boutique or even bookstore, there is background music. For young people the presence of background music seems natural. They tend to listen to their favourite songs in the headphones while going somewhere, waiting for someone and also while reading or studying.*

*The aim of the upcoming research is to find out whether student's learning outcome is affected by music they are listening to while studying. Prior research shows that music works as a motivation for many students to start and persist in studying. But regarding the effect itself, the results do not seem to be consistent. This research will take in consideration the capacity of subject's working memory, as it seems to be a crucial moderator of the final effect of music on the learning outcome.*

*The pilot study will explore which genres students usually choose to listen to while studying. In the follow-up experiment participants recruited from the Charles University will be randomly assigned into two experimental groups and one control. Those in the experimental group will be played music chosen based on the results of the pilot survey, while presented with a study text. The controls will study the same text in silence. After that all participants will take a text comprehension test. The prior knowledge of the topic will be tested in advance. The sample size is estimated at 30 participants.*

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## ASSORTATIVE PREFERENCES FOR PERSONALITY AND ONLINE DATING APPS

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### ABSTRACT

*Established couples tend to have similar personalities (i.e., assortative mating); however, the mechanism for this effect is unclear. Individuals may initially be attracted to others who are like themselves (i.e., have assortative preferences). Alternatively, couples may become more similar over time. These explanations have been difficult to disentangle. Assortative mating may be less common in online situations as barriers related to social homogeneity are removed. The current study investigates which, if any, of the Big Five personality traits were assortatively preferred in an online environment. Participants (205 females and 178 males) viewed 100 ostensible dating profiles comprised of random pairings of facial images and personal descriptions, the latter of which were pre-rated for perceived personality. Participants indicated whether they would like to “match” with each profile, mimicking responses made on dating applications, and completed the Big Five Inventory (BFI-44). Participants showed assortative preferences for agreeableness, openness, and extraversion, but not for conscientiousness or emotional stability. These results suggest that people exhibit assortative preferences in an online dating app environment. If these online preferences translate to long-term relationships, this could help explain similarities found in established couples identified in previous research.*

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## EVERYTHING IS COOL WHEN YOU'RE PART OF A TEAM

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### **ABSTRACT**

*The “replication crisis” has led to a call for initiatives to increase the replicability of psychological science, such as data and code sharing, pre-registration, registered reports, and reproducible workflows. Similarly, researchers have questioned the extent to which studies of WEIRD populations (Western, Educated, Industrialised, Rich, and Democratic) generalise to the majority of people in the rest of the world. Here, I will discuss how large-scale collaborations can improve both replicability and generalisability, with a focus on the Psychological Science Accelerator, a globally distributed network of more than 1300 researchers from more than 80 countries across all six populated continents.*

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## INVESTMENT IN ROMANTIC PARTNERS POSITIVELY PREDICTS EJACULATE QUALITY

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### ABSTRACT

*Previous research indicates that heterosexual men who are more satisfied with their romantic relationships rate their partner as more attractive, report that other men find their partner more attractive, are more interested in copulating with their partner, and perceive that their partner has greater interest in copulating with them. Furthermore, previous research indicates that greater investment in a partner correlates with greater relationship satisfaction. However, such findings have relied on self-report surveys, and none have used a physiological measure such as ejaculate quality, which could serve as a marker of both attraction to one's partner and partner investment (via investment in high-quality ejaculates). Among 45 couples between the ages of 18 and 35 years who completed self-report surveys on their relationship dynamics and who produced six ejaculate samples across a 45-day period, men's investment in their partner positively predicted ejaculate quality in terms of semen volume and the quantity of progressive motile sperm. These findings remained significant after controlling for covariates that affect ejaculate quality (e.g., duration of abstinence before sample production). Discussion situates the current results with previous literature addressing the link between partner investment and relationship satisfaction, and suggests directions for future research.*

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## **SEXUAL ORIENTATION AND THE DEVELOPMENT OF PERSONALITY: AN EVOLUTIONARY PERSPECTIVE**

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### **ABSTRACT**

*Homophobia is something that has directly affected the LGBT community for a long time and has consequences for these individuals. In this work, we will investigate whether this violence suffered by these individuals leads to significant changes in the expression of their personality traits or not. The evolution of personality traits was a mechanism used by species to adapt to the environment where they are, for example, to choose partners, survive, and deal with difficult situations. Is sexuality a factor which can influence the development of personality in humans? To try to answer this question we will use the HEXACO, Dark Triad Dirty Dozen questionnaires to measure personality traits, we will use the QUESI (Questionnaire about childhood trauma) to study the developmental environment, Homophobia questionnaire to ascertain implicit and explicit homophobia received, and finally the sociodemographic questionnaire to find out if there is a correlation between social class, ethnicity, among others, and personality traits. In further works we might see how these individuals deal with the everyday situations, for example, with stressful situations. This work is important because we need to start to think about the evolution of the personality in different models of individuals, such as no straight models: is it the same of straight model or can we find something new?*

*Keywords: LGBT+, personality, development environment, violence*

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## **ASEXUALITY: AGE OF DISCOVERY, IDENTIFICATION, & DISCLOSURE**

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### **ABSTRACT**

*Asexuality is a sexual orientation that is characterized by a lack of sexual attraction. However, knowledge of this orientation has only recently started to spread thanks to the internet. For many individuals, the discovery of this orientation may have helped to explain feelings that they had difficulty describing, leading to them identifying as asexual. However, as knowledge of this orientation has spread, the time between discovery of asexuality and subsequent identification may increase, as people are more likely to discover this option earlier in life when they are still developing their identity. This interval may also be shorter for those that more intensely experience that lack of sexual attraction. To determine if age and lack of sexual attraction is associated with the interval between discovery, identification, and disclosure of an asexual identity, 180 asexual participants answered a survey that was shared with online asexual communities. Regression analyses found that lack of sexual attraction was negatively associated with the interval between discovery and identification and positively associated with the interval between identification and disclosure, whereas age was positively associated with the interval between discovery and disclosure, but only for women. For asexual individuals, the more intense their lack of sexual attraction, the less time that occurred between discovery and identification as asexual, indicating that these individuals may have been quicker to connect their personal experiences with this label. However, time until disclosure was longer for older asexual women, potentially due to the stigma that comes with identification as a sexual minority.*

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## METHODS TO STUDY EMOTIONS IN HUMAN BEHAVIOR

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### ABSTRACT

*If we consider that the evaluation of complex emotions poses great challenges to describe their manifestations, it is important to combine methods to obtain a better approximation to the nature of these emotions. Along these lines, I will review the origins and scientific evidence that support the study of emotions in human behavior. Starting with Darwin, continuing with Eib-Eibesfeldt, and Ekman's facial expression system, and how the combinations of these ethological and experimental methods allow us to achieve a more accurate observation of emotional behavior. And finally, I will present examples of emotional displays of jealousy in children, friends and romantic partners, and some initial inferences about subtle expressions of bonding in adults, on which we are making progress in my laboratory.*

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## INFLUENCE OF ZYGOSITY AND SEX ON DIFFERENTIAL PARENTING TREATMENT

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### ABSTRACT

*Studying Differential Parenting Treatment (DPT) in twins may provide important contributions to understanding parental investment, since twins share the same developmental stage and can share 100% (monozygotic-MZ) or 50% (dizygotic-DZ) of their genes. Our aim is to verify if zygosity and sex influence the DTP of mothers/fathers of twins aged 9 to 14 years by observing the interaction between them during a playful activity. We hypothesize that: a) MZ triggers less DPT when compared with same-sex DZ; and b) In relation to DZ, opposite-sex pairs trigger more DPT when compared with same-sex pairs. An exploratory study was conducted with 15 triads (mothers: 7 MZ and 4 DZ; fathers: 1 MZ and 3 DZ). The categories used for analysis represents time spent by parents supporting each sibling during 180 sec of task and DTP score was calculated by subtracting the total duration of these behaviors for twin 1 and twin 2. For group comparison, we performed the non-parametric Mann-Whitney test. The average time of DPT for category 1 "non-interference observation" was 63.5 sec and 50 sec for 2 "manual interaction with puzzle". No significant differences were found in DPT comparing MZ ( $md1=48.3$ ,  $md2=19.9$ ) and same-sex DZ ( $md1=77.9$ ,  $md2=50.1$ ) nor comparing opposite-sex ( $md1=57.9$ ,  $md2=38.8$ ) and same-sex pairs ( $md1=77.9$ ,  $md2=50.1$ ). Data collection is still in progress. We plan to increase our sample to 100 pairs and analyze whether other factors influence DTP such as age, birth weight and health status.*

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## PHENOTYPIC VARIATION IN THE HUMAN EYE AS A PREDICTOR OF FACIAL PERCEPTION: A PILOT STUDY

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### ABSTRACT

*Human eyes tend to have brighter (whiter) visible scleral areas than the eyes of other primates, a phenomenon whose evolutionary origins are not fully understood. Some explanations invoke non-adaptive mechanisms, such as drift or side-effect of self-domestication, but there is considerable evidence that white sclerae may be adaptive, esp. by contributing to first impression formation and facilitating non-verbal communication. In particular, the visible scleral areas of an individual may be a rich source of information on their biological quality: previous studies found that individuals with paler sclerae tend to be rated as healthier, younger, less aggressive, and more attractive. In our study, we collected high-resolution facial photos of men and women from a WEIRD and non-WEIRD country (Czechia and Colombia). We measured skin and eye colouration in CIELab colour space. Stimuli were rated by local raters for attractiveness and sex-typicality. Data were analysed using Bayesian multiple regression with inter-correlated predictors. Contrary to our expectations, there was a weakly negative association between both the perceived sex-typicality/attractiveness and lightness of sclera in all the samples, except for the Czech men. For the other colour channels (red-green and blue-yellow) the associations generally pointed towards lower preference for yellow and red tones in the visible sclera. The effects of iris colouration were near-zero, a relatively strong preference for lighter irides in Colombian women being the sole exception. Taken together, the effects of sclera colouration variance are more consistent than the effects of iris colour, even across distant cultures.*

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## PERSONALITY DIFFERENCES AMONG MEN AND WOMEN OF DIFFERENT SEXUAL ORIENTATIONS

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### ABSTRACT

*Previous research has identified several psychological differences among people of different sexual orientations, including higher openness to experience and neuroticism in nonheterosexual samples. Our study aimed to further explore the relationship between personality and sexual orientation. We administered online a short form of the Big Five Inventory (BFI-10) to Czech self-reported gay/lesbian (N = 2,073), bisexual (N = 1,560), asexual (N = 203), pansexual (N = 513), and straight (N = 2,636) males and females. We performed two-way ANOVAs with sex and sexual orientation as factors. Results revealed that asexual females scored significantly lower in extraversion than females of any other sexual orientation, and heterosexual males scored lower than homosexual males. Straight males scored lower on conscientiousness than bisexual and gay males, while straight females scored higher than asexual, bisexual, and pansexual females and lesbian females were more conscientious than bisexual females. Straight males were less neurotic than all other males except asexuals, and there were no differences among females of different orientations in neuroticism. For openness, we found only a main effect of sex and sexual orientation, females scoring higher than males, pansexuals scoring higher than any other orientation, heterosexuals scoring lower than any other orientations except asexuals, and bisexuals scoring higher than homosexuals. For agreeableness, we found a main effect of sex, females scoring higher than males. Our results provide evidence suggesting that sexual orientation is not an isolated trait but is embedded in one's psychological makeup. Further research should decipher pathways of these differences.*

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## DIFFERENCES IN HANDEDNESS AND GENDER NONCONFORMITY AMONG MEN OF DIFFERENT SEXUAL ORIENTATIONS

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### ABSTRACT

*Several factors influence human sexual orientation, including genes, hormones, and maternal immunity. Some of the factors considered as proxies for hormonal influence of sexual orientation are childhood gender nonconformity and handedness. Previous research indicates that homosexual men show greater gender nonconformity (i.e. they are more feminine) but they are also more often non-right-handed than heterosexual men (a more masculine trait). Our aim was to replicate and broaden findings of previous research regarding handedness and childhood gender nonconformity on the sample of Czech men. Based on an online distributed questionnaire, we obtained data from 1,294 homosexual, 699 heterosexual and 294 bisexual men. Handedness was ascertained via Edinburgh handedness inventory, and Childhood gender nonconformity via RCGI. To test the difference in handedness among men of different sexual orientations, we performed a one-way Kruskal-Wallis ANOVA, which revealed no difference. One-way Kruskal-Wallis ANOVA revealed statistically significant differences among sexual orientation groups in childhood gender nonconformity. Post hoc Dunn's test showed that heterosexual men were more gender conforming than bisexual and homosexual men, and bisexual men were more gender conforming than homosexual men. Handedness and gender nonconformity were not significantly correlated. Our findings supported the hypothesis of prenatal or early hypomasculinization of homosexual men, but the other hypothesis regarding non-right-handedness was not supported. We suppose that our results could help with the study of etiology of sexual orientation.*

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## WEAK EVIDENCE FOR SIGNALING CREATIVITY IN THE CONTEXT OF ATTRACTIVE FACE STIMULI

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### ABSTRACT

*If creativity emerges as a result of sexual selection, as research suggests, it should be manifested in the context of an attractive potential partner, especially among singles. We tested this hypothesis by creating a dating portal context. Men ( $n = 241$ ) and women ( $n = 242$ ), including those who were single ( $n = 204$ ) and in a relationship ( $n = 279$ ), viewed photos of attractive and unattractive opposite-sex dating site users who were looking for a partner. Participants rated their attractiveness and created a bio to attract them. We monitored their motivation to perform well, mood, and sexual arousal. The bios were rated for fluency, flexibility, originality, and overall creativity. We also counted mentions of creativity used for self-advertisement.*

*The results show that merely viewing attractive stimuli did not enhance the creativity of the advertisers. However, participants who were in a relationship were less original and creative than singles. Men outperformed women in originality, but women were more fluent and flexible, and they self-advertised their creativity more often. Regardless of relationship status, the fluency and flexibility of male bios were mediated by mood valence and motivation, which were higher after viewing attractive (vs unattractive) photos. Among single men, motivation explained the fluency and flexibility of advertisements. In women, these dimensions were mediated by ratings of the photo's attractiveness.*

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## ANGER IN POSITIVE CONTEXT: ANGRY EXPRESSIONS BY WINNING FIGHTERS

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### ABSTRACT

*Sports competitors display an array of emotional reactions depending on the outcome of the competition. However, it is not expected that the winner will react with anger, as the victory in the confrontation is considered a positive context.. Nevertheless, in nature, it is well established that in several animal species upon winning a fight, the winner is more likely to engage and win future confrontations often being compelled to behave even more aggressively putting their fighting abilities on display, this phenomenon is named the “winner effect”. This study aimed to look for parallels between expressions of anger in humans and animals in conflicting contexts, a sample composed of professional fighters (N=412) was analyzed using three distinct measurements of anger: automatized facial expression recognition, body expression patterns and subjective assessments of anger intensity. Anger intensity and body expressions were coded and evaluated by seven independent raters who did not receive any information about the objectives or intends of the study aiming to avoid bias. Expressions of anger among the winners were not uncommon, even immediately after the announcement of the victory. The findings reveal that more anger expressions were found in two situations, when the two competitors had closer fighting abilities meaning the contest was more symmetrical, or when the winning competitor expected to lose the fight before the start. The study's data reveals that feeling and expressing anger in a positive valence context is possible, challenging conventional assumptions about emotional reactions to positive events.*

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## HORROR MOVIE MONSTERS AND PRIMAL FEARS: ACTIVATION OF THE FEAR MODULE IN POP CULTURE

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### ABSTRACT

*As part of human universal artistic tendencies, storytelling is possibly an evolved component of human nature. Scary stories are widespread across cultures, in most of them, an antagonist of supernatural and malicious nature plays a significant role in the narrative as a monster or villain. Despite causing fear and discomfort, horror stories capture our attention and attract huge audiences to movie theatres, possibly because it offers the benefit of training our capacities for predator/enemy detection, confrontation, countermeasures, and escape. The appeal of horror movies might relate to a specific activation of our evolved fear module. In this case, horror movie villains and monsters should generally present physical appearance and behavioral characteristics related to traits present in nocturnal ambush predators/enemies, e.g., surprise attack in close proximity, strength, merciless peruse, difficulty of facial recognition. This study compares the most prevalent traits of horror-movie monsters and those that set nocturnal challenges to ancestors' survival. We access the top international horror characters of the last 50 years according to movie critics, experts, and amateurs in cinema and pop culture web articles and thoroughly describe the monster's characteristics according to dimensions such as mode and proximity of attack, size and strength, persistence, facial expressions. We expect to show that most famous horror movies depict an antagonist monster with characteristics closely related to those prevailing traits of ambush predators/enemies. We hope to open new research avenues for human ethological studies on human horror storytelling in relation to its possible ancestral adaptive advantages.*

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## DOES HAVING SIBLINGS AFFECT THE REWARD VALUE OF INFANT FACES?

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### ABSTRACT

*“Baby schema” refers to infant characteristics, such as facial cues, that positively influence cuteness perceptions and trigger caregiving and protective behaviors in adults. Previous neuroimaging work has demonstrated that this “baby schema” activates reward-related regions in the brain. The factors that contribute to individual differences in the reward value of cute infant facial characteristics are poorly understood. These effects have primarily been explored as they relate to parental care, however infants receive care from others who are not their parents and it would be important for any caregiver, regardless of parental status, to respond to infant cues effectively. Because siblings often fulfill a caregiver role in the home, this study investigated whether having siblings, and younger siblings in particular, impacted the reward value of and perceptual sensitivity to the baby schema. Contrary to our hypothesis, having siblings did not influence the reward value of baby schema or perceptual sensitivity to baby schema in infant faces. Additional analyses exploring the potential impact of experience with younger siblings in particular also failed to show that responses to infant cues were sensitive to this type of alloparental care. Future research may consider investigating if the age difference between siblings affects responses to infant cues.*

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## CULTURAL PROCESSES IN CHANGES OF THE VITALITY OF LOCAL COMMUNITIES

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### ABSTRACT

*The work examines the degree of stabilization, innovation and cultural variability in the locality of Modrý Kameň (a small town in the south of central Slovakia). Using the example of a local type of dwelling - the layout of the house and its functional adaptations between 1920 and 2020, horizontal and vertical transmissions of cultural variants and their impact on the vitality of the entire territory will be examined. The locality's dwellings are predominantly represented by family houses, which have been changed and adapted. Some houses are maintained for generations, others are enlarged and reconstructed. Some houses became abandoned, dilapidated, or demolished over time. At the beginning of the investigated period (1920), there was identified the predominant invariant type of house. Selected houses are developmentally and historically examined (periods of reconstruction, expansion or functional change of premises, abandonment or demolition). Qualitative information from owners will be compared with data from censuses, maps and old photographs. Using the Henrich-Boyd model of cultural transmission and its extensions, local models of cultural vitality will be created. Modeling assumes the change of several variables for example the effect of migration. Previous research shows that the condition of dwellings is an important cultural indicator of the vitality of the local community. The main effects of culture transmission are migration and positive adaptations of new cultural variants. Evolutionarily, we can thus model the spread of other local cultural patterns of behavior. These significantly influence whether a given local population will grow, stagnate, or be gradually depopulated.*

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## TRADUÇÃO, ADAPTAÇÃO E VALIDAÇÃO DO QUESTIONÁRIO D-AISI (DOG ATTACHMENT INSECURITY SCREENING INVENTORY) PARA A LÍNGUA PORTUGUESA E CULTURA BRASILEIRA

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### ABSTRACT

O apego é um sistema comportamental universal que busca manter a proximidade e o contato com um indivíduo para aumentar as chances de sobrevivência. Os humanos desenvolvem esse vínculo com figuras importantes, incluindo seus cães. Tal como, os cães formam um apego com seus cuidadores humanos. Alguns instrumentos investigam e medem esse apego, tanto do humano, quanto do cão. O Dog Attachment Insecurity Screening Inventory (D-AISI) é um questionário auto-administrado que visa identificar o estilo de apego do cão ao dono, por meio de 20 questões sobre o comportamento do cão, mas ainda não validado para o português brasileiro. O objetivo é validar e adaptar o questionário D-AISI para a língua portuguesa e cultura brasileira, e também analisar a associação dos escores obtidos do D-AISI com dados do dono, do cão e da relação entre eles. Até agora, realizamos a tradução do questionário para o português, a retrotradução e a aplicação do questionário para uma amostra piloto de trinta pessoas (quatro delas especialistas em comportamento animal), que levantaram dúvidas e sugestões sobre a compreensão das questões. Após discussão e alterações pós sugestões, obtivemos a versão final, que será divulgada em todo o Brasil. Esperamos 600 respondentes para concluir o processo de validação. Será realizado as análises fatorial e confirmatória, o cálculo do coeficiente Alpha de Cronbach e modelos de regressão para fatores demográficos associados aos escores do D-AISI. Espera-se obter um instrumento com boas propriedades psicométricas a ser utilizado para um melhor entendimento da relação de apego entre as espécies.

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## THE FILMS OF ISHE PART II: ETHICS OF STUDYING PEOPLE BY FILMING THEM

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### ABSTRACT

*Ethical issues arise when recording humans on video or audio, because research files will now involve identifiable people, in contrast to using anonymous records written down while observing in real time. Additional ethical issues arise when recordings are preserved for future secondary use. This presentation will describe these ethical concerns and how to address them. The main issues that raise the risk of a breach of ethics include location (public versus private), age and cognitive capacity of the participants (children, cognitively-impaired adults), sensitivity of the behaviors being studied, and most importantly, whether those being observed and recorded have given their formal consent.*

*To create future research archives of video recordings that comply with typical ethical requirements, protocols for original collection need to follow ethical guidelines, but also protocols for sharing and future use need to follow their own separate ethical guidelines (Derry et al., 2010). Ethical guidelines for using archives of any records that contain identities focus on protecting privacy and confidentiality of the information and constricting any dissemination to aggregated findings in research channels. The education of users in ethics is critical to ensure these guidelines are followed once recordings are shared.*

*Thus, researchers should follow ethical guidelines from their governments and professional organizations prior to recording. For future use of video recordings made in the past without benefit of current guidelines, ethics committees may approve such research, but only with tight restrictions on storage and qualifications of users.*

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## **CONFORMITY? YES. GUIDED VARIATION? YES. CONSTANT OFFSPRING VARIANCE? NOT REALLY**

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### **ABSTRACT**

*Human culture is a product of social learning, influenced by a myriad of external and internal factors that shape its evolution. While previous studies have identified biases in cultural transmission, they often model culture as a set of discrete entities and operate within a single framework. This poster presents a novel approach that quantifies the effects of different factors on the spread and transformation of cultural traits on a continuous scale.*

*We created an online trivia guessing game with a social learning element – previous players' answers are shown as a possible hint. Using data from this game, we quantified the influence of different factors on the transmission of cultural information. Through Bayesian statistical methods, we compared several models of cultural offspring distribution. These models included the "Galton-2" model, in which the distribution variance is affected by the parental mean, and the "Parental Variability-Dependent Inheritance" (PVDI) model, which accounts for the effect of their standard deviation. Our results show that a combination of these models is needed to capture the complexity of cultural transmission.*

*These findings challenge the Galton-Pearson model, which fails to account for the mean and variability of cultural parents on cultural offspring.*

*Furthermore, we are able to demonstrate a weak attraction towards the correct answer and conformity to mutually similar parents in our data.*

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## **A PRELIMINARY INVESTIGATION INTO INCIDENCE OF ASEXUALITY AND AROMANTICISM IN THE UNITED STATES**

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### **ABSTRACT**

*In the 1950s, 1% of approximately 20,000 adults from Great Britain indicated that they “have never felt sexually attracted to anyone at all” (Johnson et al., 1994). Since the year 2000, estimates of the prevalence of asexuals predominantly ranged from about 0.5% to 3.3% of the general population in North America (Bogaert, 2004; Bogaert, 2013) and parts of Western Europe (Johnson et al., 1994; Høglund et al., 2014). However, few empirical studies (e.g., Prause, & Graham, 2007; Poston et al., 2010) have examined the prevalence of asexuality in the United States (US) while defining “asexual” or “asexuality” consistently with previous studies. The inconsistency in defining and sampling of asexuals, therefore, might have contributed to misconstruing the orientation as a choice (i.e., celibacy), or a sexual, physiological, or psychological disorder (Prause & Graham, 2007; Brotto et al., 2015; Brunning, 2020; Hille, 2023). Here we operationalized asexuality as “having never felt sexually attracted to anyone at all” in an online survey sampling from citizens and residents of the US via social media outlets. The survey distinguishes itself by examining the prevalence of aromanticism, operationalized as “having never felt romantically attracted to anyone at all.” In an on-going sample (N = 291), 9.7% are asexual and 4.7% are aromantic. It is unlikely that these rates accurately reflect the actual prevalence of asexuality and aromanticism; thus, additional sampling is required to broaden the sample and to reduce the risk of sampling bias. Correlations between asexuality and aromanticism will also be discussed.*

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# STRESS AND THE BEHAVIORAL IMMUNE SYSTEM. THE INFLUENCE OF SOCIAL SUPPORT ON THE RELATIONSHIP BETWEEN CHRONIC STRESS AND DISGUST

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## ABSTRACT

*People adopt various strategies to counter and evade pathogen threats from our surroundings. We wash our hands after using the restroom, avoid expired food, and reschedule meetings with ill individuals. These behaviors demonstrate the behavioral immune system's functionality, which modifies cognition, emotion, and behavior to encourage pathogen avoidance (Ackerman et al., 2018).*

*Disgust is the primary affective factor driving these avoidance mechanisms (Oaten et al., 2009). Recent research has shown that disgust sensitivity increases during periods of heightened pathogen stress, such as the COVID-19 pandemic, with individuals experiencing higher levels of disgust and contamination sensitivity (Miłkowska et al., 2021). Prior studies found a relationship between stress and disgust, particularly in the context of posttraumatic stress disorder (PTSD) (Badour et al., 2013) and traumatic experiences involving sexual victimization (Badour et al., 2011).*

*Consequently, we hypothesized a link between chronic stress and heightened disgust sensitivity as a manifestation of the activated behavioral immune system. We aimed to investigate whether this relationship would be moderated by social support, as social support is a stress-reducing factor (Cohen, 2004). Our correlational study (N = 448 participants) explored associations between chronic stress, perceived vulnerability to disease, and disgust sensitivity, specifically investigating if chronic stress correlates positively with disgust.*

*We found that chronic stress predicted pathogen disgust (but not sexual normoral disgust), perceived germ aversion, and perceived infectability. However, we did not find a moderation effect of social support in this study. Our findings corroborate the behavioral immune system's protective role during chronic stress experiences.*

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## TARANTULAS FACE TO FACE: USING LIVING INVERTEBRATES TO EXPLORE HUMAN'S ATTITUDE TOWARD NATURE

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### ABSTRACT

*Research on the relationship between humans and different groups of animals provides important information for the conservation of endangered species and also helps us to understand the emotions these animals arouse in us. Experiments are most often conducted using questionnaires, standardised pictures or a combination of these. In this project, to assess our relationship with invertebrates, we have prepared an exhibition of live tarantulas. In standardized glass terrariums, we placed 62 species of tarantulas (Theraphosidae) from all major phylogenetic lineages and in a variety of body sizes. Visitors to the exhibition (n=337) rated each species according to aesthetic preferences (beauty) and perceived fear, and at the end they could choose five species to which they contributed a fictional amount to the rescue program. The resulting ratings, on which people were in reasonable agreement (ICC: fear 0.263, beauty 0.254), showed that they were most fearful of large species regardless of colouration. Conversely, they rate species with distinctive colours or interesting patterns as the most beautiful. The amount of funding received by each species for a fictional rescue program was positively correlated with perceived beauty (Sperman's  $R=0.72$ ,  $p<0.0001$ ), but only weakly correlated with species size ( $R=0.16$ ,  $p=0.0015$ ). Thus, even for tarantulas, people prefer to financially support beautiful species, similar to most vertebrates. Although visitors had different attitudes towards spiders as a group (positive, neutral and negative), most considered spiders useful, partly dangerous and worthy of protection.*

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## EMOTIONS EVOKED BY BUTTERFLIES AND MOTHS AND THEIR CONSEQUENCES FOR SPECIES CONSERVATION

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### ABSTRACT

*Nature conservation is an increasingly important topic in which humans play a key role. Previous research has shown that people are willing to contribute to the conservation of those species they value as beautiful. Therefore, the authors of this project focus on participants' perception of aesthetic preferences in a group of Lepidoptera, including diurnal butterflies and nocturnal moths. Two sets of photographs of butterflies and moths were created, which participants ranked according to a perception of beauty. Each set contained 32 species of butterflies and moths. The first set presented them in their natural position, whereas the second set showed them in the standardized position used in animal atlases. There was a sufficient agreement between participants for both sets (Kendall's  $W$  0.38 and 0.46) and high agreement compared to other invertebrate groups. Participants in both sets agreed that the most beautiful species were the most of the diurnal butterflies and the brightly colored moths. In contrast, brown or grey moths were rated as the least beautiful. The presented position of butterflies and moths, especially the unusual body shape, also impacts ranking among some species of moths, but so does coloration, which may not be properly visible when butterflies and moths are in their natural position or, conversely, in their standardized position. This project's results can help plan campaigns to help endangered species and present those campaigns to the public.*

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## IS BALDNESS SEXY? PRELIMINARY RESULTS

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### ABSTRACT

*Many men with hair loss are uncomfortable with their condition. Permanent hair loss (male pattern baldness) increases with age and can lead to complete baldness. Hair loss has a genetic basis but can also be linked to diet or illness (e.g., cancer). Importantly, baldness can remarkably affect social perception; for instance, it can be associated with higher aggressiveness.*

*This study aims to investigate the effect of male baldness on attractiveness in relation to perceived masculinity. We expect that in less masculine men, baldness will decrease the perceived attractiveness to a greater extent than in more masculine men.*

*We used 78 Caucasian male faces without beards from the Chicago Face Database and digitally removed their hair using the Bald Head application. In total, 1551 individuals (1275 women, 18–81 years, mean=28 years, SD=9 years) rated online randomly presented 40 faces under one condition, with or without hair. Each photo was rated an average of 297 times.*

*Results showed that men with hair were rated as more attractive than those without hair ( $t_{78}=10.45$ ,  $p < 0.001$ ); however, they didn't differ in perceived masculinity ( $t_{78}=1.89$ ,  $p=0.06$ ). Contrary to our expectations, the baldness effect was the same in both under and above-average masculine men ( $t_{78}=1.91$ ,  $p=0.06$ ). More specifically, the faces with hair were rated as more attractive than those without hair despite their facial masculinity. These results suggest that baldness itself (e.g., without beardedness) does not contribute to perceived masculinity or attractiveness.*

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## THE POWER OF TOUCH: HOW THE EXPERIENCE OF A CLASSICAL MASSAGE AFFECTS ATTACHMENT STYLES AND PHYSIOLOGY

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### ABSTRACT

*This study aims to investigate the effects of massage on women with different adult attachment styles. Adult attachment style varies between the anxious partner fearing the breaking of the bond and the avoidant partner who is seeking independence, which could be connected to  $\mu$ -opioid receptor availability in the anterior cingulate cortex. Social touch in non/human primates is an important trigger of endorphin release. The effects of C-tactile touch, social touch and massage seem to overlap. Do avoidant individuals perceive touch different and benefit less from a massage therapy than anxious individuals?*

*The study aims to involve 20 female participants between the age of 20 and 25 not using hormonal contraception. First they will complete a personality test on adult attachment styles and general well-being, anxious and depressive feelings as well as demographics and information on their menstrual cycle. Data sampling will take place on two consecutive days in a randomized order. Massage will be a 30min classical massage session with moderate pressure from the sacroiliac joint to the external occipital protuberance. Control consists of laying on a heating pad under the same environmental conditions. Pain tolerance (dolorimeter) and saliva samples (cortisol) will be taken before and after a massage as well as questions regarding social orientation. HRV (heart rate variability) and skin conductance measurement based on Kyriakou et al., 2019 will take place during the intervention to measure the stress response. Findings of this study could contribute to a better understanding of individual differences in response to massage therapy.*

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# DEVELOPMENTAL ENVIRONMENTS SHAPE RETIREMENT SAVINGS CONTRIBUTIONS: INSIGHTS FROM LIFE HISTORY THEORY

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## ABSTRACT

*Countries around the world face retirement savings crises, where large portions of populations are at risk of having inadequate retirement funds. Inter-temporal financial allocations are typically framed as allocations to maximize lifetime utility by rational individuals with well-defined preferences. However, research has demonstrated that those who grew up in more stable macroeconomic conditions show greater risk-aversion and longer investment horizons. We contribute a new perspective from Life History Theory, hypothesizing that individuals who grew up in adverse rearing environments may develop higher temporal discounting preferences and therefore save less for retirement than individuals who were raised in more nurturing environments. We test this hypothesis with savings behavior and other micro-data on the complete cohort of Danish individuals born in 1980. Individuals who grew up in adverse neighborhoods, who grew up without their father, and in low-income families have significantly lower retirement savings payments than individuals from more favorable rearing environments. Importantly, we include a vector of control variables concerning laborers' income, wealth, job experience and family relations in adulthood including education, employer, and job rank fixed effects in our models. We also show that the marginal effect of income-increases on annual retirement savings payments is lower for individuals from adverse childhood environments than those from more stable environments. Future retirement savings regulation could incorporate incentives targeted certain segments of the population. Moreover, regulators should be aware of the potential social costs of greater retirement savings autonomy because of the documented association between childhood environment adversity and retirement savings preferences.*

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# PREHISTORIC ETHOLOGY? HOW THE NOTION OF OTHERNESS ALLOWS US TO BETTER TRACE THE EVOLUTION OF HUMAN BEHAVIOR

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## ABSTRACT

*Where are the limits of understanding others? In our poster, we reflect on the notion of otherness and how it enables us to better trace the evolution of human behaviour—one of the goals of human ethology. However, in trying to reach this goal, we encounter a gap between modern humans and other animals, including all prehistoric human species, for which we cannot make observations or conduct direct experiments. Researchers attempt to bridge this gap by using comparative data from great apes (Harrod, 2021) or by studying modern humans (Morgan et al., 2015; Acedo-Carmona & Munoz-Doyague, 2019). However, often the data from interspecies comparisons or the results of such studies on modern humans disregard the notion of otherness. This precludes us from asking the right questions and interpreting the results.*

*We offer some premises and examples that could serve to rethink the notion of otherness in prehistoric and ethological studies and its methodological implications. Starting with Levinas' (1995) theoretical conception of otherness as the radical alterity of other beings and the world, we ground this notion in reality and propose an operational term that will allow us to see how different perspectives affect our research and the results we obtain. We will review the relationships between us (researchers) and prehistoric humans as well as non-human species. Recognizing other humanities in their own right should enable us to better adjust our methodology for tracing back prehistoric reality and thus better understand the roots of modern human behaviour.*

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# THE IMITATION AND INNOVATION OF A MULTIDIMENSIONAL ARTEFACT

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## ABSTRACT

*The transmission of continuous cultural traits has predominantly relied on the Galton-Pearson (GP) model, which presupposes that offspring variance is independent of parental variance and implies that population variability remains consistent across generations. However, such assumption is arbitrary. Here we present a novel experimental paradigm that allows to empirically examine a proposed alternative to the GP model, the Parental Variability-Dependent Inheritance model, wherein offspring variability correlates with parental variability. Study participants will be recruited from science fairs throughout the Czech Republic. These participants will be presented with two artefacts and subsequently asked to design an "offspring" artefact utilizing the Rhinoceros 3D designing software. This design process will be facilitated through an innovative graphical user interface (GUI), and will not require specific technical skills or knowledge. Participants will be instructed to create their artefact with the intention of accomplishing one of two tasks: an aesthetic task and a mechanical task. Each of these tasks will exist in two variations. In the first variation, the scores achieved by the parental artefacts in the respective task will be concealed, while in the second variation, these scores will be disclosed. The parameter names and their corresponding values will remain hidden from the participants. The resulting artefact will be printed on a 3D printer and subsequently displayed to the next participant in the study.*

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## DUAL DRAWING: EFFECTS OF GENETICS AND AGE ON TWIN CHILDREN COLLABORATION

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### ABSTRACT

*Studying cooperation in twins gives insights as to the kin selection theory and the evolution of cooperation. A general assumption is that monozygotic (=identical; MZ) twins have a higher success in cooperative tasks compared to dizygotic (=fraternal; DZ) twins. In this microanalysis study, we investigated cooperative behaviors, rather than final performances, during a 5 min collaborative task, where the twins draw their house together using one paper sheet and 5 markers. The exploratory hypothesis is that MZ twins' behaviors will differ from DZ ones. Here, we focused on Latency of drawing (time before first drawing behavior), Drawing (total drawing time alone) and Codrawing (total time when both children draw) of 46 Brazilian twin children (Age: 6-14 years old, mean= 9.9, SD=2.2; Zygosity: MZ=22; Sex: Female=26, Mixed=10 pairs). For each behavior and each twin pair, we calculated the time difference between the two children's behaviors. We compared these variables as a function of zygosity (MZ/DZ), age (6-9/10-14) and previous task experience (1st time/2nd). The time difference between children of a twin pair have been divided by the total time of each observation, so as to obtain comparable proportions. Statistical analyses were conducted using non-parametric Fisher-Pitman permutation tests (package Coin) with R statistical software. No significant intra-pair differences in duration of Latency, Drawing and Codrawing were found in any of the groups (0.05 significant threshold). Other cooperative behaviors are being currently analyzed such as oral communication, emotional expressions, visual attention and monopolization. Data collection is ongoing.*

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## BEYOND THE VALENCE-DOMINANCE MODEL, EXPLORATORY MULTI-ANALYSIS

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### ABSTRACT

*The valence-dominance model is a popular framework for describing the underlying structure of social perceptions of faces. However, this model has been developed using a single statistical technique of dimension reduction (Principal Components Analysis), and subsequent research aiming to confirm this model also uses the same tool. Attempts to use other analytic methods are limited; this is problematic because relying on a single analytic technique may restrict our findings to a single perspective. Broadening the analytic scope using the same data may provide new insights, expand our understanding of face perception, and help inform the design of future research. Here, we use a multi-analytic approach to ensure findings are data-driven rather than analytic-driven. Using social face perception data from 11,570 participants from across the world published in Jones et al. (2019), we used analytic techniques from machine learning, such as random forest and hierarchical clustering, to gain a unique insight into the underlying structure of social face perception. Results showed that the culture and sex of the perceiver are important when making social judgements from faces, questioning the generalisability of social perception models. This potentially suggests that the valence-dominance model and support for it is an artefact of using a single analytic tool.*

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## INFLUENCE OF ZYGOSITY ON ENVIRONMENTAL SENSITIVITY AND DENTAL ANXIETY IN TWIN CHILDREN

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### ABSTRACT

*Some individuals have characteristics that make them more vulnerable to environmental stressors and also experience more benefits from environmental support, according to the Diathesis-Stress and Differential Susceptibility Models. Genetic vulnerability appears to be an important factor in the etiology of fear/anxiety in the dental context. The aim of this study was to investigate if zygosity and sex influence the similarity between siblings in their reactions to the dental environment. We followed 19 twin dyads ( $10 \pm 2$  years old) during their dental appointments. The research protocol included the use of the Highly Sensitive Child Scale (HSC), Modified Child Dental Anxiety Scale (MCDAS<sub>f</sub>), and two facial thermographic images (pre and during the treatment) selecting for analysis three points of interest: the nose, ear, and forehead. We calculated individual scores and the temperature difference between pretreatment and treatment ( $\Delta t$ ). Intraclass correlation index (ICC) and the relationship between ( $\Delta t$ ) and MCDAS<sub>f</sub> and HSC scores were examined with non-parametric correlations. Members of monozygotic twin (MZ) dyads were more alike than were dizygotic twins (DZ) on HSC and MCDAS<sub>f</sub>. Same sex DZ dyads were more alike than opposite sex. We found a significant correlation between  $\Delta t$  and MCDAS<sub>f</sub> in male MZ twins. As expected, MZ siblings were more alike than DZ, with a possible effect of sex. Our study is under way and we are increasing the sample size.*

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## THE UNIVERSALITY OF EVOLVED PSYCHOLOGICAL ADAPTATIONS: SEX DIFFERENCES ON MORAL FOUNDATIONS

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### ABSTRACT

*Previous studies observe sex differences in moral foundations domains. These differences may be attributed to the process of socialization, i.e. they are culture dependent, or they may be the result of a long history of selection, that produced psychological differences on the two sexes, therefore being evolved sex differences. An analysis about sex differences in the construct of "moral foundations" was conducted, seeking samples from broader cultural contexts available using the Moral Foundations Theory framework. To categorize moral foundations on the universality spectrum, descriptive and quantitative criteria were used. Specifically, we tested whether the four categories of universality proposed by Heine & Norenzayan (2005) could be used to classify sex differences in moral psychology. The four categories vary depending on the degree of universality, from absolute cultural dependent to absolute universal, cross-culturally found. The results show that different moral foundations have different levels of universality. "Care" was the moral foundation with the highest level of universality, where women scored significantly higher than men across countries and world regions. On the other hand, "Respect for authority" had the lowest level of agreement, suggesting that sex differences in this factor would be subject to stronger cultural and ecological mediation. Factors such as environmental sex ratio, social norms and level of WEIRDness of the samples are hypothesized as important to the outcome. We discuss the limitations of the studies' samples and usefulness of a taxonomy of psychological universals.*

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## **PROGESTIN POTENCY IN ORAL CONTRACEPTION: INVESTIGATING DOSE-DEPENDENT IMPACTS ON WOMEN'S DISGUST AND ANXIETY**

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### **ABSTRACT**

*The psychobehavioral effects of oral contraceptives (OCs) are interest to human behavioral scientists, however much of this work has clustered OC users into large groups that do not attempt to account for the unique biological effects from different OC formulations. OCs vary in potency depending on their type and dosage of progestin and although some brands are marketed as low-dose (e.g., the progestin-only "mini-pill"), most are formulated with much higher doses (e.g., 375% more) than what is necessary to reliably inhibit ovulation. By separating formulations of hormonal contraceptives, researchers have begun elucidating their unique influences on women's psychology and behavior. We set out to investigate the relationship between progestin potency and the Compensatory Prophylaxis Hypothesis – which posits that disgust sensitivity and behavioral avoidance of contamination is increased during times of progesterone-induced immunosuppression – in a sample of OC users (N=302). Here, progestin potency was not associated with disgust or contamination avoidance. Slower life history strategy, however, was significantly related to greater sexual and moral, but not pathogen, disgust, although these were not moderated by progestin potency. Importantly, these data did reveal significant relationships between progestin potency and women's affect and anxiety; Women using OCs with higher progestin potencies reported greater trait anxiety and negative emotionality, as well as greater distress from obsessive compulsive disorder-like obsessions and hoarding, checking, and neutralizing behaviors. These data are in line with an expanding research area that implicates specific progestins and contraceptive formulations in the progression of anxiety and mood disorders.*

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## THE EFFECT OF ART AND PLANTS ON BEHAVIOR IN PUBLIC SPACE

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### ABSTRACT

*The majority of human population lives in cities, and urbanization increases further. Urbanization comes with certain advantages (e.g., job opportunities) on one side, but with disadvantages (e.g., increased stress level) on the other side. To reduce the adverse effects of urban life on people, city planning tries to improve quality of life through including natural and artistic elements in public space. Previous studies show that the presence of nature and art in residential areas have a significant positive impact on human health and wellbeing.*

*In this study we address a fundamental question: how do people interact, when nature/art elements are presented in the residential areas? To this aim, we installed parklet sized interventions – so-called “Grätzl-oases” – in two different locations in Vienna, one close to the center and one in a newly-developed suburb. The decoration of these parklets was either artistic or plant-based. The decoration was systematically changed three times during our observation period. We hypothesized that the installation containing art would trigger more attention than the installation containing plants, as Vienna already is rich in urban greenery, whereas the art stimulus is characterized by a higher degree of novelty. While interaction with the installations was generally low, we observed more interactions of passers-by with the art installation.*

*Parklets as a way to increase the quality of public space are a rather new concept in Vienna. This study highlights the need for innovative methods to increase knowledge about this concept and to encourage the use and occupancy of these installations.*

*This research is funded by WWTF ESR20-034 and Talente: FFG FemTech Praktika für Studentinnen 2023 49651874, 2023 49651751 and 2023 44347304.*

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## ARE MEN MORE LIKELY THAN WOMEN TO SHOW OFF IN ROCK CLIMBING?

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### ABSTRACT

*It has been frequently hypothesized that men are more likely than women to directly compete or status, yet there have been few direct tests of this claim. To address this, we are studying rock climbing, a sport where individuals seek status in ways that range from subtle to conspicuous. Our study's main prediction is that male climbers, relative to female climbers, will report more frequently engaging in climbing-related behaviors that display or show off one's abilities or accomplishments; however, men are not predicted to report more frequently engaging other social behaviors. We will conduct pilot studies to identify behaviors that function, within the climbing community, to seek status, help others, or strengthen social relationships. In the main study, a large sample of climbers will report their frequency of engaging in the behaviors identified in the pilot studies. We will test for sex differences while controlling for climbing experience and demographic factors.*

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## PAUSE LENGTH PREDICTS COGNITIVE STATE ATTRIBUTION IN NATIVE AND NON-NATIVE SPEAKERS

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### ABSTRACT

*Speech pauses between turns of conversations are crucial for assessing conversation partners' cognitive states, such as their knowledge, confidence and willingness to grant requests: generally, speakers making longer pauses are regarded as less apt and willing. We tested if this was mediated by accent, hypothesizing that listeners would be more tolerant towards long pauses made by non-native speakers than those made by native speakers. This is because in non-native speakers, long pauses might result from prolonged cognitive processing rather than from a lack of knowledge, confidence or willingness.*

*In our online experiment, 100 native Polish-speaking raters listened to conversations, in which a speaker asked questions or made requests that were answered or granted by either native speakers of Polish or native Chinese-speaking non-native speakers of Polish. The pauses before the answers were manipulated to be either short (200 ms) or long (1200 ms). Then, the raters rated each respondent on their knowledge, confidence and willingness.*

*Our hypothesis was partially confirmed: non-natives were regarded as equally willing to grant requests, irrespective of their pause durations, whereas native speakers making long pauses were regarded as less willing than those making short pauses. For knowledge and confidence, we did not find a mediating effect of accent: long pauses signaled lower knowledge and confidence in both speaker groups.*

*One reason for the difference between our findings on willingness versus knowledge and confidence is that requests might be more socially engaging and relevant for cooperative interactions than knowledge that reflects partners' competence but not cooperativeness.*

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## THE INFLUENCE OF DISGUST ON PERSONAL PERCEPTION OF RELIGIOSITY

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### ABSTRACT

*Human behaviors are influenced by the practices of the group in which they are embedded. Greater intra-group alliances can promote advantages, such as interpersonal protection, resource production, and greater chances of survival by avoiding contamination. Among others, religiosity serves to maintain group cohesion, and is associated with individual disgust levels. While moral disgust was suggested as an important dimension of religious and social behavior, studies point out that pathogenic and sexual disgust are also associated with social practices. Here we test the influence of the three disgust domains (Pathogenic, Sexual, and Moral) on self-reported religiosity. Using cross-sectional self-report data, in Study I we test if religiosity positively correlates with individual level of the three disgust domains. In Study II, we test if self-reported level of religiosity increases after experimentally induced disgust. Participants fill in self-reports of their religiosity level, then they are randomly assigned to one of five experimental conditions exposed to sets of images eliciting the following conditions: G1: Moral Disgust; G2: Pathogen Disgust; G3: Sexual Disgust; G4: Neutral Control; and G5: Romantic Control. Finally, participants report again their level of religiosity. The data will be analyzed by mixed model effects and repeated measures. The data are currently being collected, and will be presented during the congress. We conclude whether disgust elicitation may trigger cultural evolutionary processes.*

*Key-Words: Religiosity, Religions, Disgust, Morality, Believes*

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## WHY DOES NONFATAL STRANGULATION PREDICT MALE-PERPETRATED INTIMATE PARTNER HOMICIDE?

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### ABSTRACT

*Nonfatal strangulation of women by their male intimate partner is among the best predictors of eventual intimate partner homicide. Situated within an evolutionary psychological framework, male sexual proprietariness theory addresses why men are more likely than women to kill their intimate partners. According to male sexual proprietariness theory, the likelihood of intimate partner violence, including homicide, increases when men believe they “own” their partners’ reproductive capacities. Additionally, this theory posits that intimate partner violence and homicide occur when men believe they may lose control of their partners’ reproductive capacities. Nonfatal strangulation may be a particularly strong indicator of male sexual proprietariness due to the more personal and controlling nature of strangulation compared to other forms of intimate partner violence (e.g., hitting, kicking). This review considers the literature on nonfatal strangulation as a risk factor for intimate partner homicide across the areas of criminology, medicine, and psychology from an evolutionary perspective.*

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## DO WE KEEP PROCRASTINATING AFTER THE COVID-19 PANDEMIC?

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### ABSTRACT

*Commonly defined as the voluntary delay of an intended task or course of action despite probable negative consequences, procrastination remains a poorly understood subject when it comes to its causes and prevalence. Earlier researches focus primarily on decision-making, and only recently scientists have started to study motivation as a key factor on the behavior. In addition, the COVID-19 pandemic provides a rare opportunity to evaluate the influence of environmental cues on human motivation, mental health, and procrastination from an evolutionary perspective, which may enlighten some of the mysteries behind it. To investigate the link between procrastination and mental health, we asked 216 Brazilian undergraduates to answer the Depression, Anxiety and Stress Scale (DASS-21) and the Tuckman Procrastination Scale (TPS). Although the general DASS-21 score significantly and positively correlated with the task delay trait of the TPS, it did not show so with the self-regulation trait; however, when the DASS-21 score is divided into low, moderate and high levels, both traits significantly correlate with the score, corroborating with previous studies that portray procrastination either generating or emerging from stress, anxiety, and depression. However, this link only occurred at the intermediary level. Further analysis is required to assess whether this scenario changes when analyzing for depression, anxiety, and stress separately, or higher levels of those traits may pose as external motivators for accomplishing academic tasks.*

**Keywords:** Procrastination; mental health; motivation; COVID-19

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## SPONTANEOUS FACIAL REACTION TO MEN' ANGER DISPLAYS: FACEREADER ANALYSIS

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### ABSTRACT

*Current study investigates gender differences in spontaneous facial reactions to male anger displays in a nomadic Mongolian pastorals of Southern Siberia, Tuvans. Participants of the study were living in a rural settlement of natural conservation area, Ubsunur Hollow, Erzin, and have limited exposure to the Western culture. Our earlier study of this sample has shown that that Tuvan women were less successful than men in labelling anger displays via photographs of men from their own population (Mezentseva et al., 2022). To clarify the obtained effect, we have conducted a follow-up study, where spontaneous facial expressions of Tuvans in response to male anger displays were video-recorded and analyzed using FaceReader system. FaceReader identified and measured the intensities of basic emotional configurations (happiness, sadness, anger, fear, surprise, disgust) which evoked at 0.1, 0.2, 0.3, 0.4, 0.5 and 1 sec. Emotional responses did not differ between the six tested time points. To exclude information unrelated to emotional responses, were facial reactions were calibrated to the neutral facial expressions. Men who correctly labelled angry facial configurations expressed more happiness and sadness. In turn, women who identified male anger correctly expressed more disgust. The fact that spontaneous emotional reactions to anger were associated with ability to correctly recognize the emotion suggests the cognitive nature of observed phenomenon. The experiment was conducted with the support of Owen F Aldis Award 2020, data processing was supported by research grant funded by the Ministry of Science and Higher Education of the Russian Federation (grant ID: 075-15-2022-328).*

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# DOES CONSENSUAL NON-MONO GAMY ADDRESS THE RECURRENT ADAPTIVE CHALLENGES OF HAVING MULTIPLE INTIMATE PARTNERS? EVIDENCE FROM AN INTERNATIONAL SAMPLE

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## ABSTRACT

*Multi-partnering occurs when an individual is in a romantic, sexual, or otherwise intimate relationship with more than one person. Humans have diverse practices for forming and maintaining several concurrent relationships, including consensual non-monogamy (CNM; e.g., polyamorous, swinging, and open relationships), plural marriage, casual dating, sex work, and infidelity. In this talk, I argue that these practices are alternative strategies for resolving the adaptive challenges of multi-partnering, and that each produces distinct relationship quality outcomes. I highlight CNM and review how people within these relationships reportedly address the recurrent risks introduced by multi-partnering, such as abandonment or resource disinvestment, cuckoldry, pathogen transmission, zero-sum rivalry, and status loss. From this, I develop a model by which evolutionary scientists might study CNM to discover novel solutions to sexual conflict and improve the taxonomy of human courtship. Throughout, I present data from an ongoing international collaboration of evolutionary, sexuality, and relationship scientists to comprehensively identify and quantify CNM relationship maintenance practices and their causal linkages to relationship quality, interpersonal conflict, and health.*

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## PRELIMINARY REPORT OF THE EFFECTS OF GAMING ON INTIMACY BETWEEN STRANGERS

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### ABSTRACT

*Play behavior has been extensively studied under ethological perspective, however gaming behavior in adult individuals is an understudied topic, despite its ubiquity and high frequency. Among other functional hypotheses, games are suggested as competitions for the best allies and development of friendship networks for times of need. Here we aim to test experimentally if games can facilitate the formation of new friendships/intimate relationships. Therefore, we have coupled strangers and randomly assigned them for one of two groups. Group I answered a questionnaire of peer perception and intimacy before any contact, after a game bout, after role-playing a discussion between friends and again after a game bout. Group II answered at baseline, then role-playing, game bout, role-playing. Except for the baseline and first intervention, there was an interval of approximately 14 days between each data collection. Data collection is still ongoing, but preliminary results indicate that, in addition to how many times participants have interacted with each other, cooperativeness and its interaction with participant's sex are the core predictors of intimacy growth. An exploratory analysis also suggests that, after gaming, winners report less intimacy, while losers report more intimacy. This could provide important information about the proximal mechanisms of group formation and cohesion.*

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## AN EXPLORATORY STUDY ON PERCEPTION OF SOCIAL POWER ASYMMETRY IN TWIN DYADS

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### ABSTRACT

*The aim of the current study was to assess social power asymmetry in twin dyads based on the observation of their behaviors during a brief conjoint activity. A panel of twenty-four adults watched and judged 8-to 9-year-old twins (same sex Monozygotic or Dizygotic twins) engaged in a 5-min common activity which was to draw together their house. The task was to evaluate if one twin of the dyad had a dominant role over the other. All judges watched the same five videos and, after each video, answered if: (a) there was a dominance relationship and individual A was dominant, (b) there was a dominance relationship and individual B was dominant, (c) it was not possible to identify a dominance relationship between individuals, and (d) "I don't know". Objective questions were followed by non-obligatory open-ended questions for clarification on the first answer. When averaging the 5 videos answers, 52% of the judgments considered to perceive social power asymmetry in the twin dyads and 90% agreed on which twin was dominant. Content analysis of the qualitative responses showed that most frequently mentioned characteristics as indicative of dominance were resource control (46.24%), activity focus (19.35%), and initiative (12.90%). The study showed that this experimental task is suitable to promote the emergence of power asymmetry among children and can be a useful tool to better understand sibling relationships, especially in the social development context of twins. We plan to increase the number of twin dyads and the number of adult judges.*

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## POTENTIAL CUES FOR ATTRACTIVENESS IN THE PERCEPTION OF PERSONAL ORNAMENTS

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### ABSTRACT

*Extra corporal personal decoration (e.g. body painting, jewelry, hair dress and clothing) is a universal in humans today and probably goes back to at least 100 000 and perhaps up to 300 000 years ago. Primates may cover themselves or hang things around their bodies, but do not have an ostentatious display of elements that are not part of their own body. On the other hand, some male bowerbirds spend most of their time making extravagant “carpets” of fruits and other items in front of their bowers to attract females. These extracorporeal ornaments, unique in the animal world, are also very attractive for human perception. Successful male bowerbirds can seduce up to ten females who will not be interested to copulate with their less skillful mates. Obviously, there are reproductive advantages in the display of extra corporal items. Ornithologists have identified the keys for success of these constructions. Our aim is to investigate the efficiency of human personal ornament displays in attracting attention and raising the desired emotions in the perceiver. We will present jewelry and other types of body decoration from various cultures. In order to find potential keys and discuss the perception of “beauty”, we will use photographs of various types of body decoration superimposed on schematized human bodies to be rated in an experimental setting. We will present the lay-out of this study for discussion by the participants of the meeting.*

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## DIFFERENCES BETWEEN HETEROSEXUAL AND BISEXUAL MEN AND WOMEN IN PARTNER CHOICE

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### ABSTRACT

*The present academic work seeks to compare the romantic and sociosexual strategies employed by adult heterosexual and bisexual individuals in the selection of partners of the opposite sex from the perspective of evolutionary psychology and human ethology.*

*A total of 309 participants took part in the study, including 224 females (72.5%), 82 males (26.5%), two individuals who self-identified as 'non-binary' (0.6%), and one transgender man (0.3%). The age distribution was as follows: 18-25 years (n = 169); 26-35 years (n = 95); 36-45 years (n = 35); and 46 years and above (n = 10).*

*The Experience in Close Relationships questionnaire, Self-Assessment, Ideal Partner and Real Partner questionnaire, the revised Sociosexual Orientation Inventory (SOI-R), and a sociodemographic questionnaire were administered.*

*No significant differences in attractiveness were observed between men and women. However, women showed a preference for partners with higher financial resources compared to men.*

*Regarding sociosexuality, men obtained higher scores in the area of sexual desire, but no differences were found in terms of sexual behavior and attitude.*

*There were no significant discrepancies in some aspects such as attractiveness and fidelity, but there was a greater difference between the sociosexuality rates in both sexes, with men scoring higher in this aspect. Furthermore, the research was limited by an insufficient sample size of bisexual individuals, which suggests the need for further research and deeper investigation on the subject.*

*Keywords: evolutionary psychology; human ethology, human mate choice; sociosexuality; sexual strategies.*

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## BEYOND THE PROSPECT: EXAMINING THE FACTORS THAT INFLUENCE SLEEP LOCATION PREFERENCES

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### ABSTRACT

*A substantial portion of human life is devoted to sleeping, during which we are particularly susceptible to threats. Subsequently, humans may have preferences for the environment and location of their sleep to maximize their safety and chances of survival. The Prospect-Refuge theory suggests three elements of prospect (good view of the surrounding environment), refuge (a location that provides safety and concealment), and danger (avoidance of factors that can threaten one's survival, such as predators or hostile humans) as determining factors. Distance from the entrance has been also suggested as another factor. In current ongoing research, we attempted to replicate the effect of previous factors, in addition to exploring the social nature of human living such as sleeping arrangement with romantic partner and children. We utilized 3D bedroom simulations to generate objective scores and improved the functional definitions of these determining variables. In study 1, using a sample of online responders in Iran (N=141, MAge=26.3, %63.1 Female) we found the distance and refuge, but not the prospect, as significant predictors of location preferences. Moreover, we found a distinctive sex difference in the allocation of the preferred location to partners while in both sexes preferred locations were allocated to the children. Our findings indicate the sensitivity of the sleeping preferences to social parameters and that previous studies might have overestimated the effect of the element of prospect.*

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# DOES PRESTIGE BIAS INFLUENCE THE RECALL AND TRANSMISSION OF COVID-19-RELATED INFORMATION? PROTOCOL REGISTRATION FOR AN ONLINE EXPERIMENTAL STUDY

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## ABSTRACT

*During epidemics or pandemics, constant epidemiological changes occur, and many people lack access to accurate and timely information. In this context, learning from a prestigious source may be more adaptive than analyzing the content of information. To investigate whether people remember and transmit more information when it is attributed to a prestigious source in the context of COVID-19, we will conduct a two-stage online experiment. The first stage will be a recall task, and the second will be a transmission task. Both tasks will be based on a fictional text provided to participants containing information about the use of a fictitious drug for COVID-19. There will be four versions of the text, each with the same information but different sources attributed to the information. Participants will read one of the versions and complete a distractor task. Afterward, a recall test will be conducted where participants will retell the story as accurately as possible. In the second stage, a linear chain transmission experiment will be conducted with eight chains of four participants for each fictional text. Each participant will write what they would like to transmit about the text, which will be spell-checked and sent to the next participant through an online platform. To analyze the results, we will use multilevel logistic regression. The resulting data can help us understand the role of prestige bias in our cognition and consequently, our understanding of certain behaviors in pandemic scenarios.*

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## PERSONALITY TRAITS AND SEXUAL ORIENTATION PREDICT ACADEMIC CHOICES

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### ABSTRACT

*Personality is defined as behavioral syndromes, that are consistently expressed together in an individual. In humans, personality is associated with vocational interests, with the choice of an undergraduate major, how long individuals will remain in the course, and how successful they will be in their respective profession/study area. These associations can differ between sexes and among sexual orientations. Here we test effects of personality, sex, and sexual orientation on the choice of three scientific areas (biological, social, and exact sciences). A total of 687 undergraduate Brazilian students (social: N = 299, biological: N = 248, exact: N = 132) were recruited through online media and answered a battery of questionnaires in the Qualtrics platform. Six personality traits were measured by the HEXACO-60 scale, and the 7-point Kinsey scale was used to assess sexual orientation. Results show a positive marginal effect of Openness on social sciences and negative effect on biological sciences ( $\delta y / \delta x = 0.14$  and  $-0.14$ , respectively). In social sciences, we found an interaction between Conscientiousness and heterosexuality ( $\delta y / \delta x = 0.21$ ). In biological sciences, interactions between being a homosexual male and Agreeableness had a negative effect ( $\delta y / \delta x = -0.62$ ) and an interaction with Extraversion had a positive effect ( $\delta y / \delta x = 0.83$ ). No significant effects were found in the exact sciences. Personality traits have an adaptive value and influence activities that individuals develop to survive in the given environment. In modern industrial environments, variation in personality along with sex and sexual orientation partially affects career choice.*

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## DO DEFICITS IN AFFECT PROCESSING MITIGATE AGAINST THE DISGUST AMPLIFICATION EFFECT IN MORAL JUDGEMENTS?

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### ABSTRACT

*Moral foundations theory taxonomizes moral concern, positing that moral judgments originate from disgust reactions of the behavioral immune system. The disgust amplification hypothesis posits that the induction of disgust should amplify the severity of moral judgments. Research thus far has been inconclusive [JV1]. If affective reactions play a role in moral cognition, individuals with affect processing deficits, such as alexithymia, should make moral judgments that diverge from others. College students (N = 202) were randomly assigned to auditory affect induction conditions (Neutral, Disgust, Anger), completed measures assessing domain-specific moral judgments and alexithymic traits (Difficulty describing feelings (DDF), difficulty identifying feelings (DIF) and externally-oriented thinking (EoT)). Although affect ratings using the PANAS validated the manipulation, post manipulation disgust [JV2] and anger did not predict severity of moral judgements. However, DDF was positively associated ( $\beta = .31, p = .01$ ) and EoT was negatively associated ( $\beta = .14, p < .001$ ) with severity of Harm-based judgments. EoT was positively associated ( $\beta = .18, p = .01$ ) with severity of Loyalty-based judgments, qualified by interactions of EoT and DDF with disgust. DDF was positively associated ( $\beta = .29, p = .01$ ), whereas EoT was negatively associated ( $\beta = -.27, p < .001$ ) with severity of Purity-based judgments. Thus, although there was no significant association between disgust or anger and severity of moral judgments, results are consistent with the hypothesis that affect processing plays a role in moral cognition.*

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## THE EFFECT OF WINNING AND LOSING IN VIRTUAL REALITY GAME ON THE PERCEPTION OF MALE DOMINANCE

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### ABSTRACT

*Previous research indicates that men's perception of dominance is related to individual differences in the perceiver's dominance. The ability to modulate dominance perceptions should allow for a decrease in potential costs in contests (e.g., injury, loss of resources). Our study aimed to test the effect of changes in dominance (winning/losing in a virtual reality (VR) game) on the perception of male dominance.*

*Forty-six men (M = 24.4 ys, SD = 4.30 ys, range = 18-36 ys) participated in 2 sessions a week apart. To manipulate their dominance status, participants played an immersive first-person shooter game in VR against a trained confederate who controlled the outcome (participants won and lost once, order randomized). After each game, participants rated 45 male facial and full-body photographs for dominance. They completed the Positive and Negative Affect Schedule questionnaire before and after each game to test the effect of winning/losing on the affective state.*

*Using a mixed-effects model, we found no significant effect of winning/losing on the dominance ratings. Further, we found a significant positive effect of winning on positive affect, while losing did not influence positive affect in the first session. Further, in the first session, participants had a significantly higher negative affect score after losing.*

*Even though winning/losing in VR game was associated with changes in positive and negative affects, our results show no difference in perceived dominance and are not in line with the previous studies showing that changes in dominance modulate men's perception of other men's dominance.*

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# FACIAL FEATURES SPEAK (ALMOST) UNIVERSAL LANGUAGE: CROSS-CULTURAL AGREEMENT IN PERCEPTION AND PREFERENCES IN EUROPEAN AND ASIAN FACES

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## ABSTRACT

*Facial attractiveness, as well as other facial characteristics, such as averageness, sexual dimorphism, youthful appearance might serve as a cue to overall biological quality (e.g., healthiness, fertility, mating value). Shared ethnicity and environment may affect the accuracy of their perception and rating to a different degree: our aim was to investigate, in a cross-cultural context, several factors known to influence judgements of facial appearance.*

*We took standardized facial portraits of 100 Czech participants and 93 Vietnamese participants of both sexes. These portraits were then assessed for attractiveness by Czech, Czech Vietnamese, i.e. members of the Vietnamese minority living in the Czech Republic and native Asian Vietnamese raters. We also measured facial averageness, asymmetry, and sexual shape dimorphism using geometric morphometrics.*

*Czech raters of both European (CZE) and Vietnamese (CZVN) origin converged on their rating of Czech faces, while Asian Vietnamese raters (AVN) disagreed with both. In contrast, second study investigated the perception of Vietnamese faces using the same three groups of raters (CZE, CZVN, AVN) and the same procedure, and revealed no significant differences between the rater groups.*

*In general, we found that facial averageness plays a significant role in attractiveness assessment in almost all rater groups and for both sexes of stimuli, highlighting the role of averageness as a universally used trait in face perception. Moreover, the rating given to shape-related facial features by the three culturally diverse groups was similar, indicating a significant degree of cross-cultural agreement in the attribution of facial characteristics.*

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## HUMAN RESPONSES TO ANCESTRAL AND MODERN THREATS COMPARED TO AIRBORNE DISEASES: PRELIMINARY RESULTS

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### ABSTRACT

*Through evolutionary predisposition, humans are able to respond quickly and adequately to threats relevant to our ancestors. These threats evoke strong emotions: e.g., fear (snakes, heights), but also disgust (spoiled food, contamination). Relevant modern threats (transport vehicles, electricity) may have similar effects although previous research is not always consistent. Airborne diseases (e.g., viral) represent a specific category, as they are becoming more important with the increase in population in modern times and may even reach pandemic proportions. Are humans capable of adequate behavioural response to cues linked to airborne diseases?*

*Thus, the aim of this research is to compare the subjective evaluation of ancestral vs. modern threats that evoke fear or disgust, and to compare it with the emotional response to airborne diseases. Respondents completed a battery of psychometric questionnaires measuring fear, disgust, or anxiety (e.g., Snake Questionnaire, COVID Stress Scales, Trait Anxiety Inventory) and rated vignettes describing potentially dangerous situations on a seven-point scale (according to fear, disgust, and anger). Preliminary data have shown that ancestral stimuli work better for eliciting disgust, whereas fear is surprisingly stronger in modern threats. Although infectious diseases are usually associated with disgust, fear predominates for some airborne disease vignettes. Anger correlates with disgust ratings, but not with fear. Although there is high agreement in emotion ratings, people over 55 years gave higher fear scores and experienced more distress during the covid-19 pandemic, although levels of safety behaviours did not differ across age groups.*

*This research is funded by GAČR project 22-13381S.*

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## USING THE SCOPING REVIEW TO ADVANCE THE KNOWLEDGE ABOUT HUMAN BEHAVIOR EVOLUTION

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### ABSTRACT

*A scoping review is a type of study that aims to synthesize knowledge from an exploratory research question, through the systematic search, selection, and analysis of scientific evidence. It is a strategy that can be used, for example, to identify concepts and types of available evidence, methodologies implemented, and knowledge gaps. The initial step in conducting a scoping review is to develop a research protocol, using direction documents such as the Joanna Briggs Institute recommendations and the PRISMA-ScR guide. The construct is oriented by the acronym PCC (Population Concept Context), from which the focus and research questions, objectives, and inclusion and exclusion criteria are delineated. It also aids in the search strategy and data extraction. The protocol of the scoping review, containing detailed information about the conduct of the study, should be recorded on specific platforms to inform its development to the scientific community. The final work must present the motivations for its realization, a description of the execution of the steps set out in the protocol, how the data extraction occurred, and a detailed presentation of the results obtained. Considering that the human behavioral evolution area literature is heterogeneous and complex, this type of review can be used to map concepts, theories, and methodologies to inform researchers of their applicability and support decision making for subsequent studies, and consequently, to promote the progress of this knowledge area in a coherent and rigorous way.*

*Keywords: Scoping review, human evolution, knowledge mapping.*

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## **SOCIAL SUPPORT FROM FAMILY MEMBERS AND THE PERMANENCE OF BLACK STUDENTS AT THE UNIVERSITY**

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### **ABSTRACT**

*The family can represent a social support for the permanence of black students, considering the various difficulties faced in the academic trajectory. This exploratory and cross-sectional research aims to describe and analyze the family social support of black students and its relationship with their permanence in university. Interviews will be conducted with 16 family members, using interview script developed by the researcher, in order to identify the beliefs, behaviors and feelings of family members about entering and staying at the university, mapping the expectations about the academic trajectory and life of these students. After transcribing the interviews, content analysis will be used to identify the categories in each interview. And, after categorizing, the functional analysis of behavior will be used as a form of interpretation beliefs, feelings and strategies or actions of family members that represent social support, in different perspectives, for staying at the university. Thus, the aim is to contribute to the academic psychology literature by understanding the behavior of family members, the different dimensions of social support and how race-ethnicity interferes in the relationship between family members.*

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## THE REDUNDANCY OF MULTILEVEL SELECTION IN INVARIANT DOMAINS

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### ABSTRACT

*Aggressive instincts and behavior have been considered as adaptive traits in the individual fight over resources that were also adaptive at the level of the species or serve as density-dependent factors in population control (Lorenz (1963), Wilson (1978)) and it is clear that species that engage in inter-group violence, like humans, lions and chimpanzees, make use of the same basic adaptations presumably evolved for solving intra-group conflict. In this article I build a theoretical mathematical game-theory model to answer the question of under which conditions group selection can change the frequency of an individual genetic or cultural trait evolved at the individual level in domains of interactions or conflict situations that affect pairs of individuals. I prove that when the domain of interaction at the individual level competition and the domain of interaction at the group level are isomorphic (the strategic situation is basically the same) and the groups' adaptive fitness is fully translated from the individuals in the group, group selection adds nothing to explain the evolution of the trait and can be safely dismissed as irrelevant. I then apply the model to different domains of interaction like aggression in the hawk-dove game, the social exchange game assimilated to peaceful trade and labor division and the domain of interaction of fair division in the ultimatum game, that serve as possible examples of the redundancy of competition at the group level in explaining the genetic or cultural evolution of the trait.*

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# HOW ART MAKES PUBLIC SPACE A MORE INTERACTIVE BEHAVIOR SETTING

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## ABSTRACT

*Design, structure and features of public space in urban environments can influence physiological and psychological wellbeing of their inhabitants. Our perception has evolved to process stimuli linked to individual and phylogenetic relevance. Artworks can constitute such stimuli, potentially reduce stress and help make cities more liveable. They may also function as a conversation starter, enhancing social interaction.*

*We used the open access AI platform Dalle.2 to create artworks varying along the dimensions of self-relevance and beauty, to be displayed in public spaces in Vienna. Based on a survey we identified artworks of high beauty/high relevance (HBHR), high beauty/low relevance (HBLR), low beauty/high relevance (LBHR) and low beauty/low relevance (LBLR).*

*Observing individuals and groups (Naimed = 800 subjects), we focus on interaction with the displayed artwork and social interaction between people, as well as how much time people spend in the art installation's vicinity.*

*We expect that the presence of artworks will increase the attention of passers-by compared to the unadorned public space and that beautiful and/or relevant artwork will trigger more interactions than non-beautiful, non-relevant artwork, both with the installation and with other people.*

*With this field study, we hope (1) to gain new insights into the distinct effect of beauty and relevance based on the differences between the LBHR and HBLR conditions; (2) to gain new insights into the effect of urban art installations on people's behaviour in public space; and finally (3) to have an empirical foundation for urban design processes.*

*This research is funded by WWTF ESR20-034 and Talente: FFG FemTech Praktika für Studentinnen 2023 49651874, 2023 49651751 and 2023 44347304.*

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# A NEW INVENTORY OF MOTIVATIONS FOR INTERFERING IN THE INTIMATE RELATIONSHIPS OF OFFSPRING, SIBLINGS, AND FRIENDS: A STUDY PROPOSAL

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## ABSTRACT

*Individuals have been found to influence the romantic relationships of their family members and friends. However, the motivations for such behaviour remain unclear. The main aim of this study is to develop an inventory of motivations for interfering in the romantic relationships of one's offspring, siblings, and friends.*

*In an open-ended questions survey, 634 individuals (537 women, 18–77yo, mean=29y, SD=12y) indicated why they would intervene in the romantic relationships of their offspring/sibling/friend based on hypothetical scenarios. They were randomly presented with two out of five deal-makers and deal-breakers characteristics of potential partners (e.g., Imagine if your offspring/sibling/friend entered into a relationship with an alcoholic partner. If you felt the need to intervene in the relationship, what would prompt you to do so?). We identified 25 motivations for interfering or refraining from interfering (e.g., physical protection, concern for prospective offspring's well-being, peace in the family, functioning relationships, desire to help, belief in own experiences and relationship competence, not my business). In the planned Study 2, we will establish the empirical factor structure for these 25 motivations.*

*On a proximate level, (new) partners need to fit the current social network that can facilitate family/friend relationships. Further, when people are in love, they can be blind to certain red flags in relationships. From the ultimate perspective, the mate choice of offspring or siblings can affect the inclusive fitness of other members. Thus, we expect that the motivations of family and non-family members will be only partially covered.*

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## HOW DOES MAKEUP AFFECT PERCEIVED AGE IN WOMEN?

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### ABSTRACT

*Appearance alteration has been documented throughout the history of multiple Hominin species and has been speculated to serve sociocultural and evolutionary means. Among others, an ephemeral alteration that has gained traction is make-up, which has become widely accessible and normalized in everyday use. Appearance enhancement through makeup modifications brings an important communication and perception topic for human ethology, because it signals intentions and modifies perception of others. Among other functions, makeup affects perception of the user's age. Previous research showed that when using makeup, younger women look older and more mature while women around 40 years are perceived as younger. Also, heavy makeup makes women perceive themselves as older than light makeup. Here we aimed to study the interaction between women's self-reported age, level of makeup, and perceived age. In total, 50 Brazilian women were photographed without any makeup, and then in 4 increasing levels of makeup was applied by a professional make-up artist. Each individual photograph was then rated online by approximately 50 independent raters for age. We are now preparing the data for final analyses, specifically we will compute differences between averaged age estimations of faces without makeup (base) and 4 makeup levels, and compare them to the self-reported participants' ages. Changing age perception may be a powerful tactic of social communication, including within the context of mate choice and relationship maintenance, or social dominance in hierarchical social positions.*

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## A LONGITUDINAL STUDY OF NAUSEA AND VOMITING IN PREGNANCY - AETIOLOGY AND ASSOCIATIONS WITH PREGNANCY OUTCOME

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### ABSTRACT

*Despite its high prevalence, nausea and vomiting in pregnancy (NVP) remains poorly understood. It is associated with positive pregnancy outcomes and thus may have an adaptive function, but its aetiology is apparently multifactorial and tests of specific predictors show inconsistent results. A limitation of previous studies is that they often measure symptoms only once, and often retrospectively. In this prospective study, we used the Index of Nausea, Vomiting and Retching to measure NVP six times across the entire pregnancy of 194 Czech women. We then used mixed models to test possible predictors (age, parity, pre-pregnancy BMI, pre-pregnancy smoking, family income, education, marital status, foetus sex) and consequences (delivery mode, Apgar score) of NVP. We found that women with the lowest family incomes had significantly higher NVP in month 3 compared with wealthier women. Regarding consequences, women who had acute caesarean section and operative vaginal delivery (i.e. emergency procedures) reported higher NVP in the first four months of pregnancy compared to women who had spontaneous vaginal delivery or a planned caesarean section. Furthermore, women who had babies with lower Apgar scores had significantly higher NVP in months 3–5 compared with those whose babies had higher scores. When significant predictors were tested in the same model, only the differences in Apgar score and family income remained significant. Our results suggest that although moderate NVP symptoms do not have negative effects, socioeconomic stress may contribute to higher symptoms and that very high symptom levels may be associated with negative pregnancy outcomes.*

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# THE (INITIAL) DEVELOPMENT OF THE SEXUAL BEHAVIOR IN SAPAJUS XANTHOSTERNOS

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## ABSTRACT

*The development of sexuality in humans and non-humans primates is an important topic to understand the ontogenetic pathways of sexual behavior, but it is relatively understudied. Research with non-human primates shows that, even before birth, the social and hormonal environments influence the development of species' typical sexual behavior. However, very little is known about which are these initial sexual behaviors, their specific characteristics, or when and in what contexts they occur in most primate species. The present study aims to describe and quantify the initial sexual repertory (i.e., initial sociosexuality) in female infants of Sapajus xanthosternos. To achieve this goal, we will analyze frequencies of behaviors throughout the first twelve months of life. Then, within and between-subjects' behavioral frequencies over time will be compared and we will evaluate the contexts and the preferred sexual partners, and whether these change across time. We will further identify the types and functions of these first sexual behaviors. Studies on the ontogenesis of sexual behavior in Neotropical primates are, at the moment, scarce. The study of the sexual development in these primates might contribute to unraveling questions about early sexuality, its development, the plasticity of this behavior and about the natural diversity of the sexual behavior in human and non-human animals.*

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## EMOTIONAL INVESTMENT ON MEASURE: VALIDITY EVIDENCE OF AN INSTRUMENT

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### ABSTRACT

*Emotional investment refers to how individuals invest in their romantic relationships, encompassing attributes such as caring, affection, and romanticism. Emotional investment in romantic relationships may be crucial to human social behavior. Individuals who invest emotionally in their partners are more likely to form stable, long-lasting relationships that provide a range of benefits, such as increased support, protection, and cooperation. Despite its importance as a marker of individual differences, there is a lack of instruments in the scientific literature to measure emotional investment as a psychological trait. The present study aimed to develop and provide validity evidence for a scale to measure emotional investment. A total of 769 Brazilians from all regions of the country completed the 16-item Emotional Investment Scale (EIS) and other psychological instruments. Exploratory and confirmatory factor analyses demonstrated the adequacy of a two-factor structure for emotional investment, namely Romanticism and Affection, with satisfactory reliability indices. As expected, negative correlations were observed between the two factors of the EIS and attachment-related avoidance. The scale demonstrated satisfactory evidence of validity based on content, internal structure, and relationships with other variables. This instrument may prove helpful in both research and clinical settings, particularly in the context of studying romantic relationships.*

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## **MEDIATING VARIABLES BETWEEN THE NUMBER OF CHILDREN AND ROMANTIC RELATIONSHIP SATISFACTION: A RESEARCH PROJECT**

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### **ABSTRACT**

*Romantic relationships are crucial in human reproductive success as they facilitate partner commitment for childbearing and rearing, increasing offspring survival chances. Satisfaction in romantic relationships is essential for maintaining long-term stability, reducing mortality risks, and promoting subjective well-being and physical health. However, sustaining a successful marriage can be challenging, and many couples experience declining relationship quality over time, especially with the arrival of children. Parental investment in children may lead to scarce resources for the partner, potentially decreasing romantic relationship satisfaction, despite the increased dyadic stability. The impact of fatherhood on marital satisfaction is inconsistent across studies, with some suggesting a positive, negative, or non-existent relationship, with potential mediating variables such as planned pregnancy, religiosity, and low educational level. This research project aims to investigate the relationship between the number of children and satisfaction with romantic relationships while identifying potential mediating factors in this relationship. We expected that having more children may decrease satisfaction with romantic relationships. However, the strength of this relationship may vary depending on mediating variables such as planned pregnancy, religiosity, and educational level. Overall, this research project sheds light on the complex interplay between romantic relationship satisfaction, parenthood, and various mediating factors, providing insights into the dynamics of human reproductive success and relationship stability from an evolutionary perspective.*

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## DO PREGNANT WOMEN SHOW INCREASED SENSITIVITY TO THREAT-RELEVANT EMOTIONAL EXPRESSIONS?

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### ABSTRACT

*The ability to recognize emotions in others is critical for social communication, as emotional expressions convey information about one's internal state. "Threat-relevant" emotions (i.e., fear, disgust, anger) may be particularly important to detect rapidly and effectively given the potential negative fitness impact of encounters with threatening stimuli. Pregnancy is a state of increased vulnerability; as such, it may be particularly beneficial for women to be hypersensitive to cues of threat during this time. To determine if pregnancy enhances women's sensitivity to threat-relevant emotional displays, we investigated emotion recognition abilities in a sample of pregnant women (N=43) and age-matched non-pregnant controls (N=45). There was some evidence that pregnant women may be more sensitive to facial expressions of anger than their non-pregnant counterparts, but pregnancy did not enhance sensitivity to threat-relevant emotions more broadly or general sensitivity to emotional displays. We did, however, observe differences in emotion recognition generally among the sample. Women were relatively accurate at detecting anger, disgust, happiness, and surprise (all above 80% accuracy), but relatively less adept at detecting fear and sadness (accuracy between 50-60%). Additional analyses did not detect any effect of stage of pregnancy (gestational week) on threat-relevant emotion recognition. Contrary to our prediction, the current study does not provide strong support for the claim that the dramatic increases in estrogen and progesterone that occur as a function of becoming pregnant upregulate sensitivity to threat-relevant stimuli.*

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## EXCLUSIVITY IN RELATIONSHIPS ON MEASURE: VALIDITY EVIDENCE OF AN INSTRUMENT

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### ABSTRACT

*Exclusivity in relationships refers to how much an individual is willing to engage in a committed, monogamous, and faithful love relationship. It is one of the seven dimensions of sexuality that is stable throughout life as a personality trait. A high level of exclusivity in relationships refers to a person's willingness to engage in an exclusive romantic relationship, indicating a preference for committed and monogamous relationships and staying faithful to their partner. This predisposition is related to sexual and reproductive strategy, where individuals who are more faithful and monogamous tend to seek and maintain a committed relationship, representing a long-term sexual strategy. In contrast, less monogamous and less faithful individuals tend to opt for casual relationships with multiple partners, representing a short-term sexual strategy. This study aimed to build and present validity evidence and reliability indices for an instrument to measure exclusivity in relationships. A total of 797 Brazilians from the country's five regions answered the 11-item Exclusivity Relationships Scale (ERS) and other psychological instruments. Exploratory and confirmatory factor analyses revealed the suitability of a two-factor structure with adequate reliability indices to explain exclusivity in relationships. As theoretically expected, the two factors, Fidelity and Monogamy, correlated negatively with the three factors of Sociosexuality and Attachment-related avoidance. Also, men scored high in both factors of ERS than women. The scale is a valuable instrument to assess the tendency towards exclusivity in relationships through contextualized items.*

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## IS GENDER IDENTITY A PREDICTOR OF THE RELATIONSHIP BETWEEN PEOPLE AND NATURE?

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### ABSTRACT

*The relationship with nature is a psychological construct composed of cognitive, affective, and experiential aspects. Innate factors, as well as psychosocial factors, can shape the way we relate to nature. Scientific literature shows that sex is an important variable in explaining the relationship with nature, based on studies that show that men and women differ in many aspects of this relationship. However, this categorization does not consider the psychosocial factors of individuals' gender identity, as it does not consider transgender experiences. In this project, we believe that transgender people will relate to nature according to their gender identity and not their biological sex, and that gender identity influences people's emotions regarding nature. We hope not to find differences in the nature relationship scale between cisgender and transgender women, as well as cisgender and transgender men. We also expect that cisgender and transgender women will exhibit more positive emotions towards nature compared to cisgender and transgender men. The research will be conducted online through a Google form, consisting of questions on psychosocial aspects and affirmative statements from the Nature-Relatedness (NR) Scale, using a five-point Likert scale for the NR affirmatives. Based on our results, we aim to broaden the debate on gender and nature studies.*

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## SEXUAL RESTRAINT ON MEASURE: VALIDITY EVIDENCE OF AN INSTRUMENT

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### ABSTRACT

*Sexual restraint can be understood as a human tendency characterized by an individual's willingness to limit sexual behavior and expression, including abstaining from sexual activity altogether and exhibiting a restricted approach to sexual relationships and expression. Individuals with high levels of sexual restraint view sex as a sacred or intimate act that should only occur in specific contexts, such as within a committed relationship or for reproductive purposes. They may also feel uncomfortable discussing or engaging in sexual topics or behaviors that deviate from traditional norms or values. This study aims to develop and provide validity evidence for a scale measuring sexual restraint as a personality trait. The 14-item Sexual Restraint Scale (SRS) was administered to 802 adults from all regions of Brazil, along with other psychological instruments. Exploratory and confirmatory factor analyses revealed a two-factor structure for sexual restraint, with factors labeled Restriction and Shame, which showed satisfactory reliability indices. The Restriction factor describes the tendency to limit sexual behavior, while the Shame factor describes the negative feelings and judgment associated with sexual activity. As expected, both factors were negatively correlated with the three factors of Sociosexuality. Additionally, the Shame factor was positively correlated with Attachment-related anxiety and Negative Affect. Women scored higher than men in both factors of the SRS. These results indicate that the SRS is a valuable instrument for assessing sexual restraint as a personality trait, with potential applications in various settings, including clinical and research contexts.*

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# WARFARE: RATIONAL CHOICE OR OUTCOME OF OUR BIOPSYCHOLOGY?

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## ABSTRACT

*Many citizens in the western European countries, like myself, thought that the internationalization of trade would create a global stable economy, cooperation and possibly friendly relationships between the states involved. Forgetting or suppressing armed conflict in the Balkans, war seemed a threat of the past. Now Russia's brutal attack on the Ukraine has painfully awoken us from the dream of peaceful coexistence.*

*A commonly held hypothesis claims that war was the outcome of sedentarism during the neolithic transition: farmers claimed formerly common land for themselves and this new behaviour, driven by egoistic capitalism, led to violence among the formerly peacefully coexisting human groups.*

*The history of our species, however, from palaeolithic findings to today's reality, is filled with signs of homicide and warfare as its culturally escalated and organised form.*

*Erikson's (1985) „pseudospeciation“ concept well describes the process of humans developing ethnic unities; they often do that contrasting each other, similar to the process of character enhancement („Kontrastbetonung“ in the primary ethological term) and thereby form culturally distinct groups akin to the establishment of new species in biology. A very strong driver in this process of diversification is religion, which is not, as some believe, primarily politically misused, but an emotionally powerfully charged core element in the forming and identity building of ethnic groups.*

*In opposition to this view is „rational choice“, whose protagonists claim that humans predominantly act out of carefully weighing options, gains, and outcomes. Putin's imperialistic attack on Ukraine looks like, if one follows his repeated arguments, such rational decision: the Ukrainians are not an own nation, they were always part of Russia, are dangerous „Nazis“ and about to attack their Russian brothers. Closer examination, however, shows that his effort to recreate the „Big Soviet Union“, destroyed, as many Russians view it, by Gorbachev, is not only the result of a cool, Machiavellian mind, but driven by emotions typical for the process of pseudospeciation: denying the identity and integrity of one's opponent, accusation of committing cruelties against oneself, in short dehumanising him. This and other emotionally charged attitudes and behaviours provide the basis for justifying one's aggression against the enemy, which is portrayed as self-defence. The crucial question whether one should come to assistance of the Ukrainians (predominantly an emotional) or rather stay neutral (predominantly a rational choice decision), splits the German and European public and political parties along somewhat puzzling lines.*

*Human Ethology and cross-cultural anthropology facilitate the understanding of homicide and warfare, whether it can also help to reduce or even avoid them can only be hoped for.*

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## DO ZOO VISITS IMPROVE CHILDREN'S KNOWLEDGE?

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### ABSTRACT

*Literature has more and more emphasized that the contact with nature promotes an increase in the knowledge of children, leading to more awareness of the current environmental problems. However, when it comes to zoos, it is not clear if mere contact generates an increase in knowledge, especially by children. With that in mind, we have investigated the effect of contact through visualization on the gain of knowledge during a zoo visit by children. We conducted 169 pre- and post-visit interviews with children who visited a zoo that does not have a well-structured education program. For this we chose the Dois Irmãos State Park (Recife - Brazil). The knowledge of the children was evaluated through photographs and a form with questions related to the ecological knowledge of the species of animals. Overall, our results indicate that the visit to the zoo did not influence the ecological knowledge about the animals by the children. Only when questioned about the nature of the animals did we see an effect of the visit on knowledge. Clearly, when it comes to a zoo, contact through the viewing of animals is not enough. We believe that associating a well-structured educational program with zoo visits are imperative for promoting ecological knowledge about animals. The existence of such programs in zoos, especially in developing countries, should be a major goal given its potential role in promoting an increase in the children's knowledge, especially for urban ones.*

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# YOU ARE WHAT YOU EAT: RELATIONSHIPS BETWEEN PERSONALITY, FOOD CHOICES, AND PSYCHOLOGICAL HEALTH

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## **ABSTRACT**

*When applied to the study of food choices, evolutionary psychology can provide valuable insights into why certain foods are more appealing to people than others. This study will investigate how food choices and personality traits are related and how these choices could predict individuals' psychological health beyond personality factors. By investigating the psychological factors behind food choices and how they affect our well-being, we can gain insights into the evolutionary pressures that shaped our dietary preferences and how they may have changed over time. For this study, we expect more than 250 people to respond to a questionnaire containing scales to assess the Big Five personality factors, motives for food choice, well-being in the PERMA model, self-esteem, depression, anxiety, stress, and other sociodemographic variables. The preliminary results of this study will be discussed in terms of how personality factors may predict human food choices and their consequences on people's psychological health. These findings may have important implications for understanding human food behavior and for developing public policies to promote healthy food choices.*

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## SEXUAL ORIENTATION ON MEASURE: VALIDITY EVIDENCE OF AN INSTRUMENT

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### ABSTRACT

*Sexual orientation is a complex phenomenon that has been studied across various disciplines, including evolutionary psychology. It refers to how individuals are characterized based on the direction of their sexual desires, interests, and behaviors, whether towards the same or opposite gender/sex, or both. Recent studies have highlighted the importance of viewing sexual orientation as a construct analogous to personality traits. Thus, individuals may display varying levels of heterosexual, homosexual, or bisexual orientation. This study aimed to develop and present validity evidence for a Sexual Orientation Scale (SOS). The 15-item SOS was answered by 793 adults from the five regions of Brazil, along with other psychological instruments. Exploratory and confirmatory factor analyses indicated that the best fit for the data was a two-factor structure for sexual orientation. The factors demonstrated satisfactory reliability and were labeled as Hetero-Homosexuality and Bisexuality. The study also revealed associations with other variables, as theoretically expected. For example, we observed a negative correlation between the Hetero-Homosexuality factor and Openness (Big5), and a positive correlation between the Bisexuality factor and Openness. These findings imply that greater levels of homosexuality and bisexuality traits are associated with higher openness to experience. In conclusion, the SOS demonstrated satisfactory psychometric properties for assessing sexual orientation in the Brazilian population. Research in this field is crucial for enhancing our comprehension of individual differences, particularly in human sexuality.*

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## OLFACTORY SELF-INSPECTION

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### ABSTRACT

Olfactory inspection of one's own body has been observed in various mammals, including humans. This behaviour can be used to monitor own state, including health and hygiene. Therefore, this study aimed to explore which body parts people tend to sniff, in which situations, and how frequently this behaviour occurs. Furthermore, we tested whether disgust sensitivity or hygiene habits influence this behaviour.

Respondents ( $N = 216$ , 157 ♀, 59 ♂) completed an online survey on self-sniffing behaviour, disgust sensitivity (TDDS and BODS), hygiene habits (HI-23), personality (BFI-S), health status, and sociodemographic data. The purpose-built questionnaire regarding self-sniffing behaviour assessed the incidence and frequency of sniffing different parts of one's body using verbally anchored 7-point scale.

By using Principal Component and Analysis we identified three main axes of self-sniffing behaviour: PCA1: hygienic self-inspection, PCA2: cosmetic self-inspection, and PCA3: intimate self-inspection. We further found that respondents with lower disgust sensitivity and less frequent hygienic behaviour tend to engage significantly more in intimate self-inspection (sniffing body parts such as genitalia, anal area, or navel). Sniffing their own hands and hair (cosmetic self-inspection) is, on the other hand, more frequent in respondents who reported better hygienic habits. Interestingly, individuals who reported more frequent health issues sniff more frequently areas such as the armpits, feet, or their breath (hygienic self-inspection), probably to check for a possible change in smell due to illness. The olfactory self-inspection frequency depends on various interindividual differences and the sources from which the smell originates.

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# UNRELATED LOOK-ALIKES: REFUTATION OF CHALLENGES TO TWIN RESEARCH METHODS

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## ABSTRACT

*A challenge to twin research methods by critics is that monozygotic (MZ or identical) twins are alike in personality because people treat the alike. However, a different type of interpretation is plausible: MZ twins are treated more alike than dizygotic (DZ or fraternal twins) because they evoke more similar treatment from others. A unique “twin-like” design—i.e., genetically unrelated look-alikes (U-LAs)—assessed these possibilities and explored associations among physical resemblance, personality, and social attraction, set within an evolutionary framework. Participants were from the “I’m Not a Look Alike” project by photographer Francois Brunelle, Mentorn TV in the UK, and referrals. The Personality for Professionals Inventory (PfPI), NEO, and Rosenberg Self-Esteem Scale were completed by 44, 49 and 50 U-LA pairs, respectively. Participants also completed questions about social relatedness to their look-alike. Mean age was  $M=42.49$  years, ( $SD=17.02$ ; 16-84 years). This study supported/extended earlier findings: The U-LA intraclass correlations were negligible for all personality factors from the PfPI ( $r_{is}=-.17-.12$ ) and self-esteem ( $r_i=-.15$ ), indicating no meaningful relationship between appearance and behavior. The criticism that monozygotic (MZ) twins are alike because of similar treatment is refuted in favor of a genetic/evocative component underlying twins’ personality similarity. Another meaningful finding was that fewer U-LAs expressed initial/current close social relationships at the highest level (20.5%, 22.2%), vs. reared-apart MZ twins (79%, 80%), respectively, consistent with earlier findings. In the context of naturalistic settings, we can better understand with whom we share/perceive behavioral and physical similarities and experience continued social attraction.*

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## RESUMPTION OF MENSTRUAL REGULARITY FOLLOWING PRESUMED MENOPAUSE

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### ABSTRACT

*Prior research has demonstrated that the nature and timing of menopause and menopausal symptoms are variously affected by physical attributes, life style factors, psychosocial characteristics and pheromonal effects. The present report extends this work via a unique report. Diary data were used to examine the regular monthly periods of a fifty-one-year-old female who engaged in instructional and recreational dancing over a period of seven months with the same partner. Following a regular schedule of dancing that involved close physical contact, menstrual frequency and regularity were restored; prior to her participation in partner dancing, her periods were infrequent and irregular. Menstrual regularity was maintained during a subsequent twenty-month period while the female subject and her dancing partner were romantically involved. Exposure to male ancillary secretions may have forestalled the onset of perimenopause and/or menopause while restoring menstrual regularity, although the subject's improved mood and self-esteem were likely contributors. These findings offer novel and creative ways of possibly postponing menopause via naturalistic methods and activities.*

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## PERCEIVED TRUSTWORTHINESS OF ONLINE DATING BIOGRAPHIES

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### ABSTRACT

*Background: Online dating biographies (i.e., bios) vary in trustworthiness due to viewers' perception of bio accuracy and the dimensions of selective self-presenting (i.e., SSP), the amount of positive presenting information ranging from modesty to arrogance. Bios containing modest language and warranting language (i.e., WL), or verifiable information that viewers can confirm (e.g., via social media, triangulation techniques) may increase perceived trustworthiness of the profile owner.*

*Purpose: Assess how high SSP (arrogance) versus low SSP (modesty) and WL usage in online dating bios affect the perceived trustworthiness of profile owners. We hypothesized that modest bios using WL would correlate with high perceived trustworthiness. We also hypothesized arrogant bios lacking WL would correlate with low perceived trustworthiness.*

*Methods: Cisgender women attracted to men (N= 66) provided demographic information and rated 40 different bios (i.e., 20 modest/WL bios, 20 arrogant/No WL bios) on a scale of 1 ("Not at all trustworthy") to 10 ("Completely Trustworthy") via Qualtrics.*

*Results: A paired samples t-test was used to assess the trustworthiness of online dating profiles among (1) modest and verifiable bios and (2) arrogant and unverifiable bios. There was a significant difference in trustworthiness between modest/verifiable bios (M= 7.63, SD= 1.21) and arrogant/unverifiable bios (M= 3.90, SD= 1.86);  $t(65)= 13.90, p < .001$ .*

*Conclusion: Profile bios signaling modesty via SSP and using WL are perceived as more trustworthy than bios signaling arrogance and lacking WL.*

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# COMPARING COOPERATIVE BEHAVIORS IN CHILDREN FROM YURAKARE SOCIETIES IN BOLIVIA AND URBAN POLISH CHILDREN: A MICROANALYTICAL STUDY

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## ABSTRACT

*Understanding cooperation from a cultural perspective is of great interest, as our ability to cooperate has co-evolved with culture, shaping who we are as humans (Boyd & Richerson, 2009). Investigating cooperative behaviors from the earliest stages of life is essential to gain insights into the development of cooperation skills. This poster presents a study comparing the cooperation of siblings from indigenous small-scale Yurakare societies in Bolivia and large city in Poland. Using a microanalytical approach, the study examined episodes of cooperation, focusing on every little behavioral manifestation of the emerging ability to cooperate. The aim was to verify differences in cooperative behaviors between groups and whether culture paves the way for the development of cooperation skills in the earliest stages of development. The bottom-up approach used in this study focuses on embodied actions of interacting individuals in a shared environment, allowing for a better understanding of cooperative behaviors (Tollefsen & Dale, 2018).*

*The study aimed at investigating the cooperative behaviors exhibited by pairs of children during a wooden tower-building task. The procedure involved recording the activity using two cameras and subsequently analyzing the data using the INTERACT software, employing pre-defined codes. The analysis focused on categories such as attentional management, cooperative molecular behaviors, and molar assessment of interaction quality within the dyads. The sample comprised a total of 42 children, including 22 Yurakare children (N=22; M=58 months; SD=19.81 months) and 20 Polish children (N=20; M=63 months; SD=21.92 months). We preliminary analyses and discusses the observed differences between the two groups.*

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## INFLUENCE OF MAKEUP APPLICATION ON NON-VERBAL BEHAVIOR OF BRAZILIAN WOMEN

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### ABSTRACT

*Appearance modifications are frequent in animal species, and serve a variety of evolutionary functions, from increasing survival (predator protection) to social functions (mate attraction or status communication). In humans, the usage of makeup is very ancient and influences perceptions by others. Here we aim to test whether changes in appearance using different levels of makeup influence women's non-verbal behavior. We hypothesized that when wearing makeup, women would demonstrate behaviors linked to greater self-esteem, such as gestures, which might influence third perceptions. We analyzed 10-second excerpts from interviews with 36 Brazilian women, each one in six experimental conditions (total N=216): no makeup, makeup simulation (with colorless cosmetics), light makeup, moderate makeup, heavy makeup 1 and heavy makeup 2 (applied by a professional make-up artist). We adapted the Ethological Coding System for Interviews, which is an ethogram designed to measure non-verbal behaviors during interviews and includes 38 behaviors grouped into 8 categories: affiliation, submission, prosocial behavior, flight, assertion, gestures, displacement and relaxation. Using Boris software, we made point-event observations of non-verbal behaviors, and now we are finishing the second observer analyses. So far, the repeated measures revealed that most categories did not differ among the six experimental phases. However, the frequency of relaxation was significantly lower in the no makeup phase when compared to the moderate makeup phase. There was also a decrease of gestures when comparing the no makeup phase with the moderate makeup phase. This indicates some subtle changes in non-verbal behavior as an effect of makeup usage.*

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## TESTING EVOLUTIONARY HYPOTHESES OF POSSIBLE FUNCTIONS OF FEMALE ORGASM

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### ABSTRACT

*The female orgasm may have evolved to select partners with advantageous characteristics for both direct and indirect investment in offspring. Current hypotheses suggest that the female orgasm is context-sensitive and serves three primary purposes: 1) increases chances of conceiving with men of superior genetic quality (sire choice); 2) signals men with high investment potential (pair bond); and 3) identifies partners with greater empathy, less violence, and greater altruism (partner choice). Nevertheless, empirical studies testing these claims remain limited. We aimed to investigate the potential influence of partner characteristics on the frequency and quality of female orgasms. A total of 1263 sexually active women (mean age = 28) with male or female partners completed the Female Sexual Function Index (FSFI), Marital Empathy Questionnaire (MEQ), and rated Partner Characteristics, including kindness, intelligence, health, attractiveness, income, femininity-masculinity, and submission-dominance. Regression analysis showed that the orgasm domain of the FSFI was weakly but positively predicted by higher scores of partner health, femininity, dominance, and MEQ ( $R^2 = 0,06$ ), partially confirming the sire and partner choice hypotheses. Overall, female orgasm frequency and quality are greater when partners possess traits that can enhance the reproductive success and/or relationship quality. Alternatively, female orgasmic functioning can serve as a signal of fertility or overall health and can attract and maintain relationships with individuals possessing specific reproduction and relationship-enhancing qualities.*

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## **BRINGING ENTOMOPHAGY TO THE TABLE: COGNITIVE AND CULTURAL BIASES OF ENTOMOPHAGY IN BRAZIL**

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### **ABSTRACT**

*In this project, our objective is to understand the cognitive and cultural biases that influence the selection of insects as a food source, and identify the reasons behind why some individuals do not consume them, through the perspective of evolutionary psychology. To achieve this, we will use online questionnaires divided into three stages, which will assess participants' individual perceptions of various insect species, using the leafcutter ant (*Atta* sp.) as our model organism. Each stage will consist of 11 images of different native or invasive insect species, followed by questions to evaluate participants' perception and recognition of them, as well as their feelings of fear, disgust, and their intentions to consume them as food. We aim to test several hypotheses, including whether entomophobia is induced by disgust, whether the leafcutter ant is not culturally perceived as an "insect," and whether it has a higher recognition of beneficial effects on nutrition and/or health compared to other insects. By analyzing the results of our work, we hope to gain insight into the role of cognitive mechanisms, such as the Behavioral Immune System (BIS), in the selection of entomophagic resources, as well as whether factors related to insect recognition lead to BIS activation. Ultimately, this study aims to provide a better understanding of how the human mind responds to entomophagy and how it can be utilized to combat hunger in the country through more effective public policies, given its high economic and nutritional potential.*

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## THE IMPORTANCE OF OBJECTIVE COMPLEXITY IN BIRD VOCALIZATIONS FOR THEIR ATTRACTIVENESS TO HUMANS

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### ABSTRACT

*The similarity between bird vocalizations and music is well-known. It's not surprising that bird sounds have influenced many music composers. Complexity is an important factor in making music appealing to the human ear. But does objective sound complexity also play a role in the attractiveness of bird vocalizations to humans? In our study, we conducted experiments to assess people's preferences for bird vocalizations based on their level of complexity, as measured objectively. Additionally, since men and women generally enjoy music in similar ways, we examined whether there are any differences between the sexes in their appreciation of bird sounds. The study involved 114 adults living in a rural district in northeastern Brazil. The results showed a clear and consistent preference for more complex sounds among the participants. Both men and women were attracted to the songs of birds. This is the first time that the importance of complexity in human appreciation of bird vocalizations has been objectively demonstrated. Our findings emphasize the connection between bird vocalizations and music for people. This study not only has theoretical implications but also practical ones. It can potentially help predict which birds are at a higher risk of being captured based on their sound complexity, which in turn could aid in biodiversity conservation efforts. Furthermore, considering the universal appeal of bird songs to humans, it would be beneficial to select singing birds as flagship species for conservation initiatives. We hope that our research will inspire further investigations into human ethology.*

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## GIFT GAME AND STUDIES OF COOPERATION AMONG TRADITIONAL SOCIETIES AROUND THE WORLD

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### ABSTRACT

*Economic games are a useful tool to simulate cooperative interactions between humans. However, they have been widely applied in university samples. Studies of traditional populations in naturalistic environments can give us a more complex view of human behavior. The gift game is one of the new methods to investigate cooperative behavior, which aims to verify the amount of social capital of each individual in a group. In that way, we are investigating how widespread is that game used in traditional populations around the world. Through a scoping review, we are going to investigate the main results of empirical studies using the gift game in a broad overview of evidence for cooperative markers, such as kinship, reciprocity, social status, and socioeconomic characteristics. In search of all relevant published studies, we can identify answered questions in the field and what kind of gaps we could fill in the next researches.*

*Keywords: evolution of cooperation, economic games, naturalistic behavior*

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## EVOLVED PSYCHOLOGICAL MECHANISMS IN DEFENSE AGAINST INFECTIOUS DISEASE: THE CONNECTION BETWEEN THE NATURALISTIC MIND AND THE BEHAVIORAL IMMUNE SYSTEM

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### ABSTRACT

*This work addresses the importance of the behavioral immune system (BIS) and the human naturalistic mind in the fight against pathogens and infections. Exposure to pathogens has been a strong selective pressure for our species, which demands an important role for the physiological immune system. However, activating this immune system can be costly for the body and is not always effective. Natural selection favored the evolution of a motivational psychological mechanism, the BIS, which is a set of cognitive, affective and behavioral mechanisms, very sensitive to the identification of clues linked to pathogens present in the environment. The naturalistic mind, in turn, is a cognitive structure that brings together resources so that human beings can deal with challenges linked to their relationship with the environment. We argue that these two cognitive apparatuses operate in a complementary way to maximize behavioral strategies, proactive or reactive, to avoid contamination by pathogenic agents. Additionally, considering the challenges posed by modern environments, we propose the term autoimmune behavioral response to indicate a maladaptive BIS response.*

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# LOCAL ECOLOGICAL KNOWLEDGE AS A TOOL FOR THE STUDY OF BEHAVIORAL ECOLOGY

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## ABSTRACT

*More and more has Local Ecological Knowledge (LEK) become a tool for scientific knowledge and conservation strategies. With that in mind, we aimed to access the LEK, to understand how it can provide information regarding the behavioral ecology of mammals and which variables would influence such knowledge. We expected that contact with nature will influence LEK, as well as, that people will know more about conspicuous behaviors. The study was carried out in the district of Ribeira (Paraíba, Brazil). Data collection was divided into two moments: (i) free listing (n = 192) and (ii) interviews (n = 150). The contact variables were: time of residence, occupation, age and frequency of encounter with the species. Behavioral variables were: conspicuous behaviors, cryptic behaviors. We verified that people, who carry out rural activities, live longer in the region and encounter animals more frequently have a higher LEK. We also observed that people are better aware of the conspicuous behaviors of species when compared to cryptic behaviors. Our findings provide arguments for the use of Local Ecological Knowledge as a potential tool for studies regarding behavioral ecology. We emphasize that, when accessing local information on behavioral ecology, one should consider the informant's profile and the animal's conspicuous behaviors as they are the most known by local residents. It is important to acknowledge that LEK can be an accurate, fast and low-cost way to obtain information about wild animals which should be adopted by behavioral ecology researchers.*

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## DOES EMOTIONAL CONTEXT INFLUENCE EMPATHY SCORES?

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### ABSTRACT

*Empathy consists in observing and understanding the emotional reality of the other, from their point of view. As a socio-emotional skill, the emotional background of the subjects is part of and influences empathic experiences, involving individual and contextual variables, such as experiencing losses of loved ones or moving around and having to adapt to new places. The objective of this work was to identify if deaths of beloveds and changing contexts has influence on empathic level. Data were collected in 2 schools in Natal - RN. The sample consisted of 153 participants aged between 5 and 10 years old. Two instruments were applied to the participants: a sociodemographic, from which we could know if the subject has experienced events like death of parents, siblings, pets, and if they had moved from another city or neighborhood and school; and a questionnaire to measure the empathic level, the Empathy Scale for Children and Adolescents. No differences were observed in the empathy score levels of subjects who had experienced such events. Children can become capable of perceiving emotions in others and build an empathetic relationship only with the knowledge of various emotions and how to deal with them, as well as modulate their behavior to deal with events that arouse them. For a more robust understanding about the influence of individuals' emotional responses on empathic process, studies that address a wider range of responses to different emotional variables need to be conducted.*

*Keywords: emotional background; empathy; children behavior.*

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## THE ROLE OF LIFE HISTORY IN STRUCTURING LOCAL MEDICAL SYSTEMS

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### ABSTRACT

*In this project, we explore several ecological and evolutionary theories for life history evolution, including the Life History Theory, the Embodied Capital Theory, and the Grandmother Hypothesis, to broaden our understanding of the construction of local medical systems (LMSs) throughout the lifespan. LMSs are important systems and have been considered a human adaptation strategy to solve problems associated with health. There is evidence that life history profiles are important for different patterns of knowledge regarding nature's resources. However, there are many knowledge gaps associated with structuring LMSs. A central question is: "How does knowledge about medicinal plants differ and develop throughout the lifespan?" After the ethical assessment (registration No. 5.584.381), for the analysis of our models, we are collecting memory and knowledge data about medicinal plants in the Franco rural community, Cocal, Piauí, Northeastern Brazil. Data have been collected since October 2022 using semi-structured interviews, the free listing technique, and direct observation. We intend to test a set of hypotheses related to life history and knowledge about medicinal plants in LMSs, including (1) information that confers greater adaptive advantages; (2) the development and differentiation of knowledge; (3) investment and parental care; and (4) the development of skills and perception of difficulty about the practice associated with the use of medicinal plants. Life history theories offer frameworks that can help us broaden our knowledge about the structuring and evolution of LMSs.*

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## CAN PSYCHOPATHOLOGY SYMPTOMS AFFECT CHILDREN RESOURCE SHARING IN COLLABORATIVE CONTEXTS?

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### ABSTRACT

*Symptoms of childhood psychopathology can negatively affect the expression of prosocial behaviors, which in turn are important for cooperative performance in resource sharing in collaborative contexts. In this sense, this research project aims to investigate whether the presence of psychopathology symptoms in childhood can affect the sharing of resources between Brazilian children in a collaborative task. Seven to 11-year-old children from Goiânia-GO will participate in this study, in same-age pairs. Child psychopathology symptoms, divided in five behavioral domains of dysfunction, will be measured using the Strengths and Difficulties Questionnaire, applied to the caregiver about their child's behavior. To assess resource sharing in a collaborative context, a "marble run" task will be used, where children must coordinate their actions to retrieve rewards (marbles) from a long tube across four trials. At the end of each trial, one child can spontaneously choose to share the rewards with their partner. Children's interactions and cooperative behaviors during the task will be recorded by two researchers independently. From these observations, an ethogram of positive social interaction behaviors (such as verbal praise) and negative ones (such as demands between children) will be created, and a "cooperative score" will be calculated. Statistical analyses will assess the association between the cooperation score and child psychopathology domains. This study will contribute to the clarification of child psychopathology symptoms and children's cooperative behavior.*

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## WHY DO WOMEN HAVE AFFAIRS? TESTING THE MATE-SWITCHING HYPOTHESIS OF FEMALE INFIDELITY

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### ABSTRACT

*Whereas the ancestral benefits of male sexual infidelity are straightforward (i.e., inseminating a greater number of women directly increases the probability of reproductive success), the ancestral benefits of female sexual infidelity are less clear. An alternative to the dual mating strategy hypothesis (i.e., that women seek “good genes” from short-term affair partners while securing investment from cuckolded long-term partners) is the mate-switching hypothesis (i.e., that women’s primary motivation for extra-pair affairs is to assess alternative mating options before abandoning an existing long-term partner). From self-reports of heterosexual women in relationships of at least six months duration, the current study tests several predictions derived from the mate-switching hypothesis. We predicted that greater extra-pair sexual involvement would be associated positively with women’s self-reports of (1) perceived “mate value” discrepancies with their current long-term partner, (2) cost-inflicting behaviors displayed by their current long-term partner, (3) dissatisfaction in their current long-term relationship, (4) quality/availability of alternative (i.e., extra-pair) partners, and (5) feelings of extra-pair love. Preliminary analyses provide support for these predictions. Our findings further bolster the claim that the mate-switching hypothesis may explain the ancestral benefits of female infidelity better than alternative hypotheses.*

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## A NEW INVENTORY MAPPING THE INTERFERENCE IN THE INTIMATE RELATIONSHIPS: A STUDY PROPOSAL

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### ABSTRACT

*Parents tend to interfere in their offspring's mate choice and romantic relationships. The influencing behaviour varies from offering advice to arranging marriages. Importantly, parents are not the only individuals who can affect one's relationship. In this study, we focused on the influence of parents, siblings, and friends. We aimed to develop an inventory of interfering behaviour based on data gathered from open-ended question survey, interviews, and portfolios from previous research.*

*The goal of Study 1 was to determine a list of interfering behaviour based on hypothetical scenarios. In total, 565 individuals completed the qualitative survey (528 women; 18–72yo, mean=25yo, SD=5yo). Respondents were randomly assigned to one out of five deal-breaker and deal-maker characteristics of potential partners. They were asked to describe how they would behave (e.g., If your offspring/sibling/friend enters a relationship with a violent partner, how do you think you would react?). After categorising responses, we obtained three lists of overlapping behaviours, further completed for actions from previous research. The final lists consisted of 67 interfering behaviours for coupled individuals and 47 behaviours for singles.*

*Study 2 involved 1608 individuals (1315 women, 18–90yo, mean=31yo, SD=12yo) randomly presented with behavioural actions towards their offspring/sibling/friend. They completed The Parental Influence on Mate Choice Scale, The Instrument Assessing Manipulation Tactics for convergent validity, and Ten Item Personality Scale for divergent validity. After completing the data collection process, factor analyses will be conducted. The structure of the questionnaire will be validated in Study 3.*

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## TAKE A WALK ON THE WILD SIDE: HOW YOUR FIRST TATTOO MIGHT TRANSFORM YOU INTO A RISKTAKER

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### ABSTRACT

*While previous research suggests a possible link between tattooing and increased risk-taking tendencies, the effect of getting a tattoo on short term risk taking tendency has not been investigated yet. This study aims to cast light on the effects of getting a first tattoo on risk-taking behavior in women.*

*The study will involve 20 female participants who will undergo treatment on two consecutive days. In one session they will get a small tattoo, in the second condition they will relax on a mattress. The order of the treatment will be assigned randomly. Participants will choose a preset design, and the tattoo will be applied professionally to their forearm. Before and after each session, participants will complete a questionnaire that assesses their risk-taking tendencies, impulsivity, and sensation-seeking. Their heart rate, skin conductance, and skin temperature will be measured throughout both sessions to assess stress levels. Cortisol levels and pain thresholds will be measured before and after each scenario. A control group of 20 women who would never want a tattoo will complete the same questionnaire to rule out self-selection bias.*

*Data will be analyzed using paired-sample t-tests to determine whether the tattoo session results in a greater increase in risk-taking tendencies compared to the relaxation session.*

*The findings of this study will contribute to our understanding of the relationship between tattooing and risk-taking behavior in women, providing valuable insights into the short-term effects of getting a tattoo and potentially leading to future research on the long-term effects of tattoos on behavior.*

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## INVESTIGATING THE CONTENT OF CASUAL CHATTING: HUMAN CONVERSATIONAL BEHAVIOUR REVISITED

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### ABSTRACT

#### **Introduction**

*In 1997, Dunbar, Marriott, and Duncan claimed that conversations about social and personal topics accounted for about 2/3 of conversation time. The finding caused a considerable impact and helped motivate the evolutionary Social Brain theory and the influential “gossip” theory of language origins that promote the idea that language emerged to manage complex social relationships, which required improving communication between individuals. However, the original study suffered from a large number of methodological limitations. In our study, we revisited Dunbar’s original idea in a more rigorous way, using a large corpus of natural Polish conversations.*

#### **Methods**

*Our dataset consists of N = 535 casual conversations. We use “Spokes”, a corpus of Polish casual, informal conversations, based on live recordings (Pezik, 2012). 274951 lines of transcribed text contained M = 8.32 words (SD = 8.59). Our sample is highly diverse: 62.85% is from females; the speakers are 1–99 years old and from all educational backgrounds. Each line in the dataset is coded by two expert judges (native Polish speakers). Only the lines coded the same by both judges will be used for the analysis. The coding scheme was informed by our preliminary small-scale study (Szala et al., 2022) that utilized fragments of the same database. We established that the coding method was consistently applied by all coders. The study has been pre-registered (<https://osf.io/kjf4e/>).*

#### **Results**

*Data collection has been completed, with analyses currently underway. Full results will be available by the time of the meeting.*

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## UNPREDICTABILITY IN CHILDHOOD AND ITS INFLUENCE ON PERCEIVED UNPREDICTABILITY AND WELL-BEING DURING THE COVID-19 PANDEMIC

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### ABSTRACT

*Individuals vary in how they experience the pandemic. Childhood events, such as family unpredictability, have been found to influence behavioral responses in adulthood. With this premise, this study aimed to investigate the relationship between childhood unpredictability and current perceptions of unpredictability and well-being. This is a cross-sectional study conducted in Brazil between November 2021 and May 2022. A total of 438 participants completed online questionnaires, and cluster analysis was used for group participants based on childhood experiences of unpredictability. Three groups were identified: low unpredictability, high unpredictability with family support, and high unpredictability without family support. ANOVA was used to investigate differences between the groups in terms of beliefs about current unpredictability and subjective well-being. Thus, for both variables, those who experienced low unpredictability in childhood reported less unpredictability and greater subjective well-being. They were followed by those who reported high unpredictability with family support, and finally, by the group that reported high unpredictability without it. These findings suggest that childhood events influence perceptual responses in adulthood, even in extreme situations such as a pandemic, and that family support during childhood is the most significant factor among those investigated. In summary, this study sheds light on the impact of childhood unpredictability on perceptions of unpredictability and subjective well-being.*

*Keywords: social support, family unpredictability, subjective well-being.*

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## **HANDS ON BALL: A NEW TASK TO ASSESS INHIBITORY CONTROL IN SCHOOL-AGED CHILDREN**

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### **ABSTRACT**

*Inhibitory control is an executive function related to the ability to inhibit competitive responses in different contexts. It develops during early childhood, and it is affected by several conditions, such as psychopathologies and life history stressors. In this research project, we propose an experimental task, the Hands on ball, to assess inhibitory control, in same-age dyads of Brazilian children, aged seven to 11 years, from Goiânia-GO. The task will consist of five rounds of a game. Each round will start with a ball placed at equal distance from a pair of children sitting on the floor. They will be instructed to sequentially touch parts of the body, and upon hearing the word “ball”, to immediately catch the ball. The child who does so first, “wins” the game. Inhibitory control will be assessed by the presence of anticipatory behaviors, that is, attempts to catch the ball without instruction. Anticipation behaviors will be considered body movement towards the ball before instructed to catch it. Two researchers will independently note the presence or absence of anticipation, and subsequently an analysis of similarity between observations will be performed. Other behaviors related to motivation or competition for a reward will also be sampled to create an ethogram. Questionnaires will be used to validate the task for the study of inhibitory control. This project aims to contribute methodologically to the study of inhibitory control in children, allowing application in different research subjects, from impulsivity to competition and related behaviors.*

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## **AGGRESSION AND RECONCILIATION IN WILD YELLOW-BREASTED CAPUCHIN MONKEYS**

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### **ABSTRACT**

*In primates, individuals often engage in aggressive interactions for control over mates, food resources, or territories. To restore relationships after conflicts, primates typically display appeasement behavior. Among others, sexual behavior serves as an appeasement behavior. Many primates engage in non-reproductive sexual behaviors that serve a communicative or sociosexual function, which reduces conflict, establishes hierarchies, reconciles, or reinforces social bonds. Here we aim to investigate conflict and reconciliation processes within the so far underexplored yellow-breasted capuchin monkey (*Sapajus xanthosternos*), a Platyrrhine primate. Specifically, our study aims to examine if: (1) socio-sexual interactions are associated with conflict resolution, serving to alleviate the social harm caused during aggressive incidents; and whether (2) reconciled conflicts have a lower probability of re-escalation. We will analyze previously collected videos by the Laboratory of Ethology, Development and Social Interaction from a wild population of yellow-breasted capuchin monkeys living in an area of Atlantic Forest, in southern Bahia, Brazil. Videos recorded from eight juveniles (4 males and 4 females, between 12- and 36-month-old), collected on a focal basis, will be transcribed using a specific ethogram with The Observer XT software. Interactions between sociosexual and conflict behaviors will be computed. This is the first research studying if sexual behavior serves for reconciliation following episodes of agonistic interactions in a group of free-living capuchins. Our results will be important to clarify conflict behavior in primate social groups, how sexual behaviors help to maintain relationships, and to understand the development of aggression and conflict in human and non-human primates.*

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## CHILDREN'S FRIENDSHIP RELATIONS: A METHODOLOGICAL PERSPECTIVE

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### ABSTRACT

*Existing research suggests that the nature of the input data can significantly affect the character of the outcomes. In our study, we examined differences in the social structure of children's peer groups based on sociometric and observational data collection methods and for children of different ages. Four classes of preschool, four classes of prepubertal, and two classes of pubertal children were included. Sociometric data were obtained through interviews with children about their friendship with classmates. Observational data were obtained using the behavioral interaction scanning method simultaneously with interval scanning of the spatial configuration of the children in the classroom during free play. Based on the collected data, three social networks (friendship nomination, affiliative interaction and proximity) were generated for each class. Strength (the number and strength of social ties of individual children) and Transitivity (the degree to which individual children distribute their social ties evenly across classmates) were subtracted from each network. Gender assortment and group hierarchy were also calculated for each network. The analysis showed that most of the known phenomena, such as more friends for girls and smaller close-knit groups for girls, are based on children's friendship reports but not on observed behavior. Results also showed higher gender assortment (across all ages) and hierarchy (in preschoolers and prepubescent) in friendship nomination networks than in affiliative interaction and proximity networks. In summary children's friendships perceptions are not necessarily reflected in their actual behavior. Accordingly, different data collection methods may generate different structural group arrangements and yield different conclusions.*

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## ESTABLISHING A MEASURE OF PERCEPTIONS OF PARTNER INFIDELITY

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### ABSTRACT

*Men and women often form long-term, monogamous, romantic relationships. For individuals pursuing a long-term mating strategy, accurate detection, and successful prevention of a partner's infidelity has significant consequences for reproductive success. Men who fail to detect or prevent their partner's infidelity risk cuckoldry, or the unwitting investment of parental care in genetically unrelated offspring. In contrast, women who fail to detect or prevent their partner's infidelity risk the loss of resources to their male partner's mistress. The present study sought to establish a measure of men and women's perceptions their romantic partner's infidelity-related behaviors. Using a modified version of Shackelford and Buss's (1997) cues to infidelity, we collected an online sample of men ( $n = 123$ ) and women ( $n = 114$ ) to determine whether our modified measure converged with other established measures of infidelity-related behavior. We also conducted a confirmatory factor analysis to determine whether the two distinct factors reported by Shackelford and Buss (i.e., sexual infidelity and emotional infidelity) also emerged for our modified measure.*

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## **SHOULD YOUR MESSENGER CONVERSATIONS REALLY BE BALANCED? MANIFESTATION OF ATTRACTIVENESS VIA CHAT**

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### **ABSTRACT**

*Our research focuses on the manifestation of perceived attractiveness in chat conversations. Specifically, the study aims to investigate the effect of perceived attractiveness on the number of words, the frequency of words per day, and the ratio of words between the participant and the selected persons with whom the participant interacts in a chat conversation while rating their attractiveness. The research is based on the assumption that even such reductionist quantitative data may have some predictive significance, although it has not received much attention to date.*

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## EROTOPHILIC DISPOSITION ON MEASURE: VALIDITY EVIDENCE OF AN INSTRUMENT

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### ABSTRACT

*Erotophilic disposition is one of seven sexual dimensions used to describe a person's sexual tendencies, specifically their interest in and willingness to engage in sexual activities. Individuals with a high erotophilic disposition seek frequent sexual stimulation and are easily aroused. The erotophilic disposition may have been selected throughout human evolution as an adaptive mechanism to increase reproductive success through higher rates of successful conception and increased genetic variability via diversified sexual partners. Despite the importance of this construct to understanding human reproductive strategies, the existing instruments for measuring this construct have used isolated adjectives, leading to ambiguous interpretations. This study aims to develop a scale with contextualized items to assess erotophilic disposition and validate its usefulness. A total of 798 Brazilian adults from all regions of the country completed the 12-item Erotophilic Disposition Scale (EDS) and other psychological instruments. The results of exploratory and confirmatory factor analyses indicated that two factors were appropriate: Arousal and Fetish, which had satisfactory reliability indices. The study also found several correlations with other variables. For example, there were positive correlations between the two factors of EDS and the three factors of Sociosexuality and the Openness and Extroversion factors of personality. Negative correlations were observed with the Socialization factor of personality. Additionally, men scored higher than women on both factors of erotophilic disposition. Overall, the EDS provides satisfactory validity evidence, indicating its usefulness in clinical settings and future relationship studies.*

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## "FEARLESS FAITH": INCREASING RISK-TAKING THROUGH MAGICAL THINKING

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### **ABSTRACT**

*Magical practices and their association with events and activities the outcome of which is uncertain (risky actions) have been observed at length, both in different cultures and in individuals, as much as in the real world, through questionnaires and experimental investigations. Many studies have already explored the effect of ritualizing behaviors that reduce anxiety in stress conditions, but leave open the question of the effect of magical thinking. Magical thinking, which occurs under conditions of uncertainty and feelings of loss of control, could have a similar anxiolytic effect on coping even without the associated ritualization. This paper explores the effect of magical thinking on risk-taking. This research was conducted through a questionnaire survey divided into (1) determining personal levels of magical thinking, (2) willingness to take risks in various situations, and (3) obtaining relevant control data (e.g., demographics). The magical thinking section also served as a priming of magical thinking in the experimental group. This phase preceded the questions on willingness to take risks. In contrast, the control group began the questionnaire with questions on risky behavior. This investigation will show, by comparing the experimental and control groups, whether a higher level of magical thinking is associated with increased levels of risk-taking (in general or specifically for certain types of risk).*

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## THE FILMS OF ISHE PART I: PAST USE OF FILM, AND WHERE DO WE GO IN THE FUTURE?

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### ABSTRACT

*In 1972, ISHE was founded by Irenaeus Eibl-Eibesfeldt (Germany), and Daniel G. Freedman and William Charlesworth (United States). All three pioneers have passed away: Dan in 2008, Eibl in 2018, and Bill in 2021. Today we remember how they utilized film for their research and how their work refined the methods of ethology. Some of those films are now housed in well-established film archives, and we will briefly discuss how those films may be accessed. Today we also want to suggest that ISHE members initiate a project to identify other films that ought to be preserved; towards that end, we will introduce a survey instrument designed to assess films belonging to ISHE members, and we will present results from a small trial use of the form. We wish to initiate a discussion on how the films of other ISHE researchers might be preserved for future educational/research use in film repositories or archives, and what role, if any, ISHE might play in that process.*

*This is Part 1 of a three-part presentation. Part II, with Elizabeth Hill presenting, will discuss ethical questions that must be raised when considering preserving films of people. In Part III, Carol Weisfeld is the lead presenter in the showing of an edited ethnographic film (Marina Butovskaya's *Datoga*) and raw research footage (Carol Weisfeld's *Hopi Indian playground film*) to generate discussion of possible future use for films.*

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## THE FILMS OF ISHE PART III: SAMPLE FILMS AND DISCUSSION OF POSSIBLE USES

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### ABSTRACT

*Marina Butovskaya's edited film, with music and sound, of a Datoga family in Tanzania in 2009, is an intimate portrait of a ritual for a grandson born into an extended family. This 33-minute long film shows several females celebrating the infant boy's healthy progress through a ceremony that involves shaving his head and creating small scars that distinguish their tribe from the nearby Maori, and then introducing the young boy into the village. An 8-minute-long portion of the film will be shown. Discussion questions will focus on the use of such a film for educational and research purposes.*

*Carol Weisfeld's film footage was taken on the Hopi Indian reservation in Arizona, in the USA, in 1977. This film footage, approximately 7 minutes long, has accompanying sound from the school playground, where middle school children of both sexes are playing a game. Discussion questions will focus on the use of such raw, unedited film for educational and research purposes.*

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## **A PRELIMINARY INVESTIGATION INTO THE IMPACT OF ACTIVE VS. PASSIVE CYCLING ON CORTISOL AND SELF-REPORTED STRESS RESPONSE BEHAVIORS**

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### **ABSTRACT**

*The tend-and-befriend response is exhibited more by women than men and involves tending to relationships in response to stressors (Taylor et al., 2000). Cortisol, which is released in response to physical and psychological stress (Roche et al., 2013), is positively related to affiliative behaviors in women, but negatively related in men (Sherman et al., 2017). Here we investigated the relationship between active (i.e., the participant volitionally pedals) and passive (i.e., motor-driven) cycling on cortisol response and self-reported tend-and-befriend and fight-or-flight behaviors. Participants (N=34, 12 women) participated in 30 minutes of active and passive cycling 2 days apart (order counterbalanced) and provided saliva samples to assay cortisol before, immediately after, and 30 minutes after exercise. Participants also completed a modified (Asmussen, 2006) version of the Tend-and-Befriend Scale (Turton & Campbell, 2005) to assess tending, befriending, fight, and flight responses to stress. Cortisol decreased significantly over time in both conditions, but did not differ significantly between conditions and did not correlate with stress responses. However, participants did report higher tend and flight responses after active exercise, and higher befriend and fight responses after passive exercise. There were no sex differences. Results suggest that stress responses vary depending on the physiological stress level, but cortisol does not influence this relationship.*

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## CAN ATTACHMENT-RELATED ANXIETY PREDICT LOVE ADDICTION?

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### **ABSTRACT**

*Attachment is an innate system that motivates human beings to look for proximity and protection with an attachment figure when faced with threats and stress. Romantic partners can work as attachment figures through the lifespan of one another. Attachment can be explained in two dimensions: avoidance (tendency to maintain independence and emotional distance in relationships) and anxiety (tendency to worry about a partner being unavailable and to be comfortable with dependency in relationships). Lack of anxiety and avoidance correspond to secure attachment. The anxiety dimension seems to be related to love addiction (LA), a behavioral dependence in which a person becomes dependent on a romantic relationship, despite its adverse consequences. The present study aims to test if attachment anxiety can predict LA. An online questionnaire containing socio-demographic questions, the Love Addiction Inventory, and the Experience in Close Relationship scale will be answered by at least 240 participants, who must be at least 18 years old and currently in a romantic relationship. Data will be submitted to correlation and regression analyses. As previous studies have found an association between insecure attachment and LA, the anxiety dimension is expected to predict LA positively. This finding will help plan interventions for treating LA and understand psychological disorders' biological and evolutionary origins.*

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## LOVE ADDICTION: IS IT MORE THAN PASSIONATE LOVE?

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### ABSTRACT

*Passionate love (PL) is a motivational state that drives humans to seek connection and maintain relationships. Evolutionary psychologists suggest that passion is a universal and necessary condition that has evolved to enable humans to focus their attention and resources on a single romantic partner, invest time and energy in the relationship, and ultimately reproduce. A range of positive emotions, such as excitement, joy, and pleasure, characterizes passion. On the other hand, love addiction (LA) is a dependence on an intimate relationship, marked by a behavior pattern leading to negative consequences. As a behavioral dependence, LA is characterized by salience, tolerance, mood modification, relapse, withdrawal, and conflict concerning the romantic relationship and partner. Conceptually, PL and LA are distinct but related phenomena, representing different aspects of human attachment and intimacy. The present study aims to test the relations between LA and PL empirically. At least 240 participants in a romantic relationship will answer a questionnaire including scales to assess love addiction, passionate love, adult attachment, stress, well-being, and other measures. We anticipate discovering two correlated factors; one explains PL and the other, LA items. Furthermore, we expect positive correlations between PL and well-being, and between LA and attachment-related anxiety, stress, and other indicators of relationship harm. Passionate love is a natural and beneficial aspect of human relationships, while love addiction is a maladaptive behavior requiring clinical intervention. Understanding the differences between these two concepts can help individuals develop healthy and fulfilling romantic relationships.*

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