

## **1. Jana Vlčková**

### **The high school students' misconceptions about genetics**

Revelation of misconceptions contributes to better education in appropriate field of science. Additionally, genetics is one of many problematic topics, and misconceptions surrounding it are frequent. There are both problematic concepts and difficult interconnections among them. This study is concerned with the most basic genetic concepts (DNA, gene, allele, and chromosome) and their interconnections. Additionally, the influence of independent variables (gender, belief and success in biology) is also ascertained. The respondents were 102 students from two high schools. Research tool was test containing the aforementioned independent variables and 15 two tier questions concerning about basic genetics concepts followed. The reliability of the results was determined through the use of Cronbach's alpha coefficient. The normality of the data was established with the Kolmogor-Smirnov test. Then, the descriptive methods (mean) and inferential methods (ANOVA) were used. The post-hoc test (Fisher' LSD post-hoc test) was used for independent variables with more options for revealing where the difference was (e. g. success in biology). Incidents of statistically significant influence were determined among students with different success in biology. Results indicated that the concept of 'DNA' was determined as the most problematic one for students, while the concept 'allele' was the simplest one. To summarize the results, the high school students surveyed for this study did not understand selected basic genetic concepts. In addition, they failed to interconnect genetic concepts within one complex system of knowledge, and did not realise the structure and hierarchy of these concepts in the topic as a whole.

## **2. Martin Lakomý**

Nowadays, many developed countries have implemented a policy of active ageing – that is, an inclusive policy redefining the status and roles of older people to provide them the same opportunities and quality of life as other age groups. One of the roles, which should be occupied by many older people, is the role of carer. People over 50 years of age are important providers of informal care for their grandchildren, spouses, parents and other family or non-family members. Is the provision of care in older ages associated with lower loneliness and more meaningful life, as expected by definitions of active ageing? Or is it associated with tiredness and overload? Analyzing data from the SHARE project by ordinal logistic regression, I investigate the relationship between these dimensions of life satisfaction with intensity and multiplicity of care provided to the different types of recipients. The provision of care generally does not prevent loneliness, but is related, except in the case of very intensive care, to the more meaningful life. Multiple caring responsibilities on a daily basis are also associated with overload, but this is not true for any less intensive provision of care. Older people caring for spouses are most vulnerable to negative outcomes of care; on the other hand, the provision of care outside the family seems to have only positive consequences. The provision of informal care as one part of active ageing may promote quality of life, but professional help is also crucial under some conditions.

### **3. Erika Lišková**

#### **The influence of the distribution of energy intake in each day during the week on the human body composition**

**Background:** The human body composition, especially fat mass and its distribution, is considered to be an important indicator of one's health condition. The quality and quantity of foods consumed affect our weight the same as regularity in eating and total energy intake. Variation in energy intake across 7 consecutive days is a quite undescribed situation, although is related to regularity, which is in general still discussed. The distribution of energy intake can have a significant influence on human body composition, but it can also be an important regulatory factor in many non-infectious epidemic diseases (e.g. diabetes mellitus, heartburn, dyspepsia, gout, etc.).

**Objective:** The aim of this study is to map the energy intake of the selected population on each day of the week and to put this into context with selected anthropometric parameters (body fat percentage, visceral fat, lean body mass, body circuits).

**Methods:** The research group will consist of the study participants "Obesity and its genetic background", which is realized at Department of Public Health and Department of Pathological Physiology since 2006. Data collection of investigated persons will be performed using 7 days recall and eight-polar BIA (Inbody 230; Biospace, Seoul, Korea). The acquired data will be analyzed using programs NutriDan II and Lookin'Body basic (Biospace b) and Lookin'Body 3.0 (Biospace b). Subsequently, statistical data processing will be performed using the program Statistica for Windows.

**Conclusion:** We expect that significant variation in energy intake across 7 consecutive days will be associated with a higher body fat percentage.

### **4. Zuzana Žilinčíková**

#### **Dissolution of cohabitation: mapping of the phenomenon across European countries**

This paper investigates the dissolution of cohabitation from the demographic perspective. The research is driven by a lack of official statistics and also scarce earlier research focusing on dissolution of cohabitation, per se. The paper aims, firstly, to map the dissolution rates of cohabitation across cohorts and countries, and secondly, to investigate the dissolution rates of different types of cohabitation, that is: – cohabitations with children present, childless cohabitations, first cohabitations and second and higher order cohabitations. The second aim is restricted only to more recent cohabitations that were formed after the year 1990. The sample of cohabitations is drawn from partnership histories from the Generations and Gender Survey for 13 European countries and is analyzed by means of survival analysis. The results show that cohabitations are growingly unstable for more recent cohorts in all the countries, although cohabitations in general are persistently more likely to dissolve in Western European than in Central and Eastern European countries. The analysis of more recent cohabitations shows that those with children, plus first order cohabitations a face lower risk of dissolution. Moreover, the stabilizing effect of the presence of a child is more pronounced in Western European compared to Central and Eastern European countries. The cross-national differences in dissolution rates for distinct types of cohabitations are in line with the notion that cohabitations differ in their meaning and the diversity of meanings attached to them across countries. The results of this paper suggest that cohabitations in countries with higher cohabitation rates are more diverse, at least in their stability.

### **5. Helena Kotrlová**

Long distance relationships are mainly understood from the point of view of a separation-reunion cycle (Pistole, 2010). But there are relationships more and more commonly maintained across very long

distance where a frequent reunion is not very possible. They differ from the classic ones in a range of important characteristics. In our study, we focused on the relationships of exchange students (N=365) separated from their partners for at least one semester. We investigated first relationship characteristics and also concentrated on the relationship between those characteristics and the likelihood of a breakup. It was found that long distance relationships can be highly satisfying and that partners can show high levels of intimacy and commitment during the separation. Those factors of relational quality are in a negative relation to avoidance as an attachment dimension. Avoidance and low intimacy are significant predictors for breakups among women. On the contrary low commitment significantly predicts the chance of breakups among men. The Results section discusses these findings further.

## **6. Godwin Irokaba**

### **THE CONCEPT OF INCLUSION AND THE NIGERIAN PERCEPTION OF INCLUSIVE EDUCATION OF LEARNERS WITH SPECIAL NEEDS.**

This study critically examines the concept of inclusion vis-à-vis inclusive education of learners with special needs with a view to enhancing the applicability and practices of inclusive education programmes. Inclusion and inclusive education are currently the most widely used terms in special education since the adoption of the Salamanca Statement by UNESCO in 1994. In many studies, the terms are used interchangeably to mean the same things, thereby creating misconceptions which have adversely affected inclusive education programmes and action plans in several countries. In Nigeria and other African countries, inclusion and inclusive education are no more than just integration. Nigeria's education policy recommended inclusive education, but practices "exclusive" education in special schools. The same old and failed integration policies are still used to implement inclusive education programmes due to a lack of knowledge, experience, information and inadequate resources which are all crucial to the execution and development of any inclusive education programme. The result of these inept decisions, poor planning and weak special education policies have been that of the 10.5 million out of school children in Nigeria, about 3.5 million (approximately 30%) are children with special needs. The Government needs to review its inclusive education policy to conform to global standards and best practice.

Keywords: inclusion; inclusive education; special needs; disabled; policy.

## 7. Táňa Sedláková

### *„I'm ageing but I'm not an old woman“*

#### **Social Representations of Women Ageing**

**Abstract:** The study contributes to the knowledge of social psychology and social gerontology on interpersonally shared meanings that are carried by the women ageing process. The aim of the study is to illustrate the ways of creating and disseminating these meanings. The study is rooted in social constructionism and builds on lifespan and life-course perspectives. The dialogical and structural approach of social representation theory is applied to as increase sensitivity in exploration of these meanings. By using methods of participating observation, analysis of free associations and semi-structured individual interviews, this research aims to capture shared beliefs, values and experiences that women aged 50+ attach to ageing process. The research sample consisted of members of the Brno non-governmental organization named "Ženy50" ("Women50") that encourages the personal development of women after the age of fifty and their involvement in society. Data analysis was performed by means of thematic analysis in the case of free associations, and by use of principles of grounded theory in the case of individual interviews. The findings point to two important areas: the importance of alternative representations of ageing women in a public space, and the possibility of dynamic shaping of ageing representations and the potential for interventions focused on supporting active attitudes toward the ageing process as a meaningful choice.

**Key words:** ageing, active ageing, social representations, women, third age

## 8. Hana Votradcová

### **Securitization theory: Rethinking Copenhagen**

The securitization theory as a part of the „project“ of critical security studies, aiming at rethinking the traditional ways of defining security since the 1990s, has been widely associated with the Copenhagen school, including authors such as Barry Buzan, Ole Weaver or Jaap de Wilde. Yet, the Copenhagen securitization theory has been an approach *sui generis* among critical security studies and the subject of criticism of those scholars, advocating a more clean-cut „critical“ security approach. While demanding a rethink of at least one aspect of the Copenhagen model, many scholars didn't take holistic view of securitization theory or they didn't propose an alternative enabling empirical study of securitization. Alongside this, several other concepts of securitization have been developed since the late 1990s. This article aims to summarize the existing securitization discourse and suggest a framework for a constructive rethink of the Copenhagen view of securitization, focusing on three layers of criticism. First, on the particular components of the Copenhagen school's conception of securitization – the form of speech act, the relation between agent and structure, normative level and the role of societal identity in the securitization process. Second, the methodological framework is scrutinized, focusing on the enquiry of securitization mechanism and the sector analysis. Third, the ontological level and consequences of the mixing of traditional realist, objectivist epistemology and non-corresponding basis of the sector analysis of social constructivism. The article seeks inspiration from Phillippe Bourbeau's recent publication *The Securitization of Migration*, which proposes to ground the analysis of securitization on the framework of the contextual factors, role of political elites and of the media. Methodologically, the article proposes a framework focusing on analysis of the securitization process using the method of Qualitative Comparative Analysis (QCA), which helps to produce clearly measurable and comparable rates of securitization.

## 9. Tibor Žingora

## **Challenging Prejudice with Ethnic Diversity:**

### **The Role of Threat in Secondary Transfer Effect of Intergroup Contact**

Prejudice against minorities represents one of the most pressing issues in society. Prejudice strengthens intergroup boundaries and can intensify intergroup conflict. One of the most prominent ways to challenge prejudice is intergroup contact. Experience from positive intergroup contact doesn't only reduce prejudice against encountered groups (i.e., primary effect of contact), but under some circumstances, it also lessens prejudice against other groups not directly involved in contact (i.e., secondary effect of contact; STE, Pettigrew, 2009). Although recent research clarified a number of factors mediating the primary effect of contact on attitudes, mechanisms underlying secondary effect of contact are yet to be determined.

The aim of our research was to examine *the secondary transfer effect* with respect to two salient minorities in the Czech Republic – Roma and Vietnamese. We focused on the mediating roles of symbolic and realistic threats in the links between positive intergroup contact and reduced prejudice and between negative intergroup contact and enhanced prejudice. The effects of negative intergroup contact (as compared to positive) on outgroup attitudes have been neglected in past intergroup contact research. Thus, in our study we have included both valences of participants' experiences from intergroup contact in order to come closer to the ecology of majority-minority relations.

We focused on the mediating role of realistic and symbolic threats because we assumed that perceived threats can be important factors which enhance prejudice against the Roma minority. The Roma are accused of threatening safety and of exploiting the social system of the Czech Republic. In 2013, several anti-Roma marches took place in Czech cities, showing escalated tensions between the Roma minority and Czech majority. In order to challenge prejudice against Roma, the change of perceived threat seems to be crucial. The Vietnamese minority, on the other hand, is perceived in a more positive way than the Roma. Thus, generalization of contact effects from reduced threats towards Vietnamese might be a way to decrease threats and improve attitudes towards another, more negatively stereotyped minority, the Roma.

In a sample of 820 Czech university students, we found support for our hypothesis. Positive contact with the Vietnamese reduced prejudice toward Roma mainly through reduction in perceived threats. On the contrary, negative contact led to higher level of perceived threats, negatively impacting attitudes towards Roma minority. To sum up, prejudice towards Roma was influenced by perceived threats and attitude generalization. However, the change in intergroup threats after contact was more prominent in shaping prejudice than attitude generalization.

The findings of our study indicate that positive contact with one group can be used as a tool for harmonizing relations not only with the said group but also for ameliorating attitudes toward other groups. Far-reaching implications of STE could lie in diminishing prejudice toward excluded groups that do not have opportunities for contact with majority members. At the same time, the contact situation should be structured in ways which reduce intergroup threats. However, secondary transfer effect of intergroup contact can backfire in case of negative intergroup encounters. This way, negative contact with one outgroup can solidify prejudice against other outgroups.

## **10. Petr Mikulenka**

### **White matter changes correlate with cognitive dysfunction in Parkinson disease without dementia**

#### **BACKGROUND AND PURPOSE:**

Cognitive dysfunction can be presented even in early Parkinson's disease, yet its underlying mechanism and structural pathology is still being discussed. Recent studies have linked white matter changes as assessed by DTI to both motor and non-motor symptoms of Parkinson's disease. Based on previous studies this study investigated the relationship between white matter changes and neuropsychological performance in Parkinson's disease using diffusion tensor imaging.

#### **MATERIALS AND METHODS:**

We performed MRI scans on 21 PD patients without dementia and 21 healthy controls matched by age and sex. All participants underwent comprehensive neurocognitive testing. Data analysis included a comparison of FA and MD maps by TBSS. DTI values from regions showing abnormal diffusion patterns were then correlated with cognitive scores. [this section is all grammatically correct, but it lacks flow: simple use of cohesive devices would solve this]

#### **RESULTS:**

We found a decrease in FA values and increase in MD in the PD patients compared to controls in several brain regions. These changes, predominantly in prefrontal white matter, correlated with subtle changes in a variety of neuropsychological tests. No correlations with motor scores were identified.

#### **CONCLUSIONS:**

These findings suggest that there is widespread white matter pathology in PD and it may be related to impaired cognitive performance.