Call for PhD Applications, 2021-2022

PhD Call for Applications

(Submission Deadline: 29/07/2021)

1. The PhD Programme

The University of York and the South-East European Research Centre (SEERC) announce the opportunity for qualified candidates to read for a PhD Degree that combines high-quality UK studies and a unique research infrastructure in South-East Europe.

The PhD candidates will be enrolled at the University of York (UK) while being hosted and supported by SEERC for the duration of their studies. Projects will be jointly supervised by academics at both SEERC and University of York. Upon successful completion of their studies, a PhD researcher will receive their degree from the University of York. Research projects are offered in a broad range of areas including Computer Science, Language and Linguistic Science, Management and Psychology studies.

The University of York and SEERC will be offering a small number of fee waiver scholarships for successful candidates. The fee waivers will be offered to applicants with outstanding academic records and the selection process is highly competitive. Please note that fee waivers are only given to candidates applying for full time studies. More information on the terms of reference of the fee waivers can be found at the following link:

https://www.seerc.org/new/doctoral-programme/studentships

Full Time programme. The duration is 3 years (plus a one year continuation year if required) and it requires full time commitment on the part of the PhD researcher, which means that one would have to be physically present at SEERC premises located in Thessaloniki.

Applicants for the programme must have an excellent academic record (normally a relevant Degree with Distinction). In addition, relevant work experience, a Masters degree, research training, and publications will also be considered.
2. Research Topics

We will accept applications on the following topics:

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Please see Section 7 for full details of each project proposal.

3. Entry Requirements

The University has the following minimum entry requirements:

- A relevant first Degree (2.1 and above or equivalent)
- Proof of English Language Qualifications

Please see the English language requirements for prospective students at the University of York:

https://www.york.ac.uk/study/postgraduate-research/apply/international/english/
4. Application process

We accept proposals from qualified candidates for full-time study. How to apply:

1) Contact the supervisors of your chosen topic to register your interest, and to ensure that they will be able to effectively support your application.

2) Check that you are eligible (see section 3 above).

3) Submit the following documents as pdfs (with files labelled ‘Surname Title of the Document’ e.g. ‘ArnoldPersonalStatement.doc’):
   ● Academic transcripts
   ● Contact details for two academic references (Guidance for references (PDF, 57kb))(to be contacted only if you are shortlisted)
   ● Evidence of English language ability
   ● A personal statement (1 A4 page) outlining:
     a) Why you are interested in your chosen project
     b) What motivates you to pursue PhD study
     c) What is your research experience and how does your skill set match the requirements for your choice of project
     d) Your career aspirations (after you finish your PhD)
     e) Details of contact you have had with the project supervisors
   ● an updated CV (max 2 A4 pages)- including training and qualifications with grades (and predicted grades if still studying), work experience, publications, prizes
   ● a Research Proposal

The Research Proposal should be a maximum of 2000 words excluding references (max 8 pages) and should include the following:

   a) Title of the proposed project
   b) Reference to one of the Specific Research Topics (section 6)
   c) Does your project have links to external partner/s (e.g. industry)? If so, then outline them.
   d) Background to research topic

This section needs to introduce the topic before discussing it in relation to wider academic debates. The section might seek to situate the topic and highlight why the issue being
addressed is important - this should be identified and justified as an important/interesting academic issue not simply in terms of current media/political/popular interest.

e) **Specific problem(s) to be examined**

In this section the discussion of the topic needs to be more specific. The focus should include reference to the framework or conceptual approach that the research might seek to draw on. Also the discussion is likely to highlight and make reference to parallel, comparable and complimentary research. The aim of this section is essentially to set up the area of research specifically. The challenge is to ensure that the proposed research has a substantive empirical and conceptual focus, both of which are suitably grounded in contemporary academic debate with appropriate citations to relevant literature. By the end of the section a gap in existing knowledge needs to be highlighted and the research questions(s) that the thesis will address be stated.

f) **Methods of research proposal, plan and timetable of work**

The research methods section needs to highlight what methods will be used and how, with an appropriate level of detail. In the case of quantitative research the data set to be accessed and used should be identified and the nature of proposed statistical analysis detailed. In the case of more qualitative research, again the methods should be elaborated and proposed stakeholders/populations to be interviewed/surveyed should be detailed. Due consideration should be given to accessing relevant data/interviewees. Proposals should also highlight ethical issues and potential limitations.

g) **Resources available and required (if any)**

h) **Any other information in support of your proposal**

i) **The proposal should include correct literature citations and a brief bibliography**

5. **Selection process**

The selection process will involve one or more interviews (to be contacted via skype and/or at SEERC premises in Thessaloniki) with academics from York and SEERC.

Note that all candidates who will be selected for the interview phase will be asked to provide official documentation proving their CV claims (education, past employment etc)

All applications should be submitted by 29/07/2021 via email to the University of York at YGRS@york.ac.uk. (PLEASE NOTE THAT ON THE SUBJECT SHOULD BE CLEARLY WRITTEN “SEERC-YORK PhD PROGRAMME APPLICATION”)
6. Equality, Diversity and Inclusion

University of York and SEERC are committed to recruiting doctoral scholars regardless of age, ethnicity, gender, gender identity, disability, sexual orientation or career pathway to date. We understand that commitment and excellence can be shown in many ways. We welcome applicants from all backgrounds, particularly those underrepresented in postgraduate research, who have curiosity, creativity and a drive to complete innovative research.
7. Research Topics - full descriptions

**Topic 1: Examining Consumer Sustainability Motives for Engaging in Food Trends**

**Description:**
Food and eating behaviour has transformed over the last 10 years with a greater interest in veganism, vegetarianism, and reduction of red meat (Salehi, Carmona and Redondo, 2020) with consumers increasingly changing their diets towards non-meat or replacement-meat products (Bryant, 2019). This diet shift has led to a thriving meat alternative market worldwide (theVeganSociety, 2021). For many consumers this trend is motivated by health but it is also clear that other motivators are at play including animal protection, religious beliefs, ethical reasons, taste and aesthetics (Janssen, Busch, Rödiger and Hamm, 2016). In a study by Janssen et al. (2016), 46.8% noted environment related motives when it came to consumers choosing a vegan diet. However, environmental and sustainability issues as motives to alternative diets have not been widely studied. Vegan, vegetarian and reduced meat/dairy diets have clear environmental impacts with vegan diets considered the best for the environment due to having the lowest level of GHG emissions (Chai et al, 2019). But how much does this affect, drive and motivate consumers to take up and maintain these types of diets? Do consumers consider all three pillars of sustainability (social, economic, environmental) in their choice of diet (Purvis, Mao and Robinson, 2019)? Do consumers consider local, national and/or international environmental issues within their diet choices? What is the impact of marketing in these diet decisions? How can these motivations be harnessed to both encourage healthy and sustainable eating practices? What may be the implications/dilemmas for marketing managers?

This project brings together researchers from both the CITY College University of York Europe Campus and York campuses with an interest in food, sustainability and consumption. Due to the cross Europe nature of the team and university the project has the possibility of being situated and studied across a number of European contexts and hence a cross-cultural study may be possible.

**Scope of Research:**
1. An exploration of the role of sustainability and environmental motivations in choosing and maintaining vegan, vegetarian or other reduced meat/dairy diets in the extant literature;
2. A deeper investigation of these sustainability motivations using interviews or other relevant methodologies;
3. An understanding of how sustainability motives can encourage healthy and sustainable diets.
Methodology proposed:
While we welcome candidates with interests in a range of different methodologies we particularly welcome PhD students who would be interested in tackling the project from a qualitative perspective.

Further Reading:


Supervisors:
Dr Ariadne Kapetanaki is a Lecturer at The York Management School at the University of York, UK.
Prof. Victoria Wells is a Professor and Deputy Dean of The York Management School at the University of York, UK.
Dr Alexandros Kapoulas is an Associate Professor and Research Director of the Business Administration and Economics Department at CITY College.
Topic 2: Examining gender-related organisational change at both formal and informal organisational levels through organisational discourse

Description:
Despite the considerable achievements of the last decades, gender-equality in organisations is still under considerable debate (Waylen 2014; Williamson 2020). As Lewis et al. (2017) note, there is no consensus about what a gender equality change should actually achieve. Gender-equality can be conceptualized as a “wicked problem” (Head & Alford, 2015) the nature of which still lacks unified understanding among stakeholders, and where potential solutions are unclear, highly context-dependent, and at risk to trigger adverse, unexpected consequences (Alford & Head, 2017). This area is of particular concern in light of the COVID-19 pandemic and related policy-mandated containment measures, which have disproportionately affected women’s work-life balance and employment prospects (Angeli & Montefusco, 2020; United Nations, 2020).

Scholar have argued that relevant attempts to improve gender-equality in organisations should focus on examining not only the formal sides and processes, but also the informal and less visible sides of the organizations (Waylen, 2014), hence norms and values that pertain to the cognitive and normative institutional spheres (Scott, 2001). Among various approaches and perspectives that have been linked to institutional change in organisations (e.g. behaviorist, cognitivist), the discursive approach is one of the most recent ones and linked to the linguistic turn in organizational studies. The discursive approach suggests, among others, that organizational change is the process of constructing and sharing new meanings and interpretations of organizational activities (Morgan and Sturdy, 2000; Marshak and Grant, 2008). Discursive institutionalism (DI) seemingly places an emphasis on the power of ideas and discourse inside the institutions as drivers for stability and, particularly, institutional change (Schmidt 2008). DI further draws the attention on the power of background and foreground ideas (otherwise called discursive abilities) for the evolving, maintenance and change of organisational procedures (Schmidt, 2010; Carstensen and Smith, 2016).

The aim of this study is to examine how organizational practices/policies aiming at gender-related organizational change evolve at both formal and informal organizational environments, and as represented through foreground (formal) and background (informal) discourse use. The organizational discourses (e.g. CEOs’ speeches, organisations’ annual reports, press release, meetings minutes) describing the practices towards gender-related organizational change will be examined under a critical realist perspective (Fairclough 2005; Chouliaraki and Fairclough 2010), and through various analytical systems of the organizations based on a view of organisations as open systems, composed both by rational aspects (formal processes) and natural aspects (norms and values) (Boyle et al 2001; Scott and Davis 2015).
Thus, the evolvement of gender-related policies (and consequent initiation of organizational change) will be examined as follows: a) at the formal level of the organizations, linked to the foreground discursive abilities of its sentient agents and examined through the rational and open system approach (for example through official statements), and b) at the informal level of the organizations, linked to the background discursive abilities of its sentient agents and examined though the natural system (for example through focus groups and observations).

Further Reading:
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Supervisors:
Prof. Federica Angeli is a Professor at The York Management School at the University of York, UK.

Prof. George Eleftherakis is a Professor and Director of the PhD Programme at CITY College, University of York Europe Campus.
Topic 3: “Belt and Road Initiative (BRI)”: The FDI-related Economic impact on the OBOR involved countries of Central, Eastern and Southeastern Europe

Description:
The grand strategy of China presented through the Belt and Roald Initiative (One Belt One Road -OBOR) is a long-term vision from 2013 and historically dates back several centuries. This project encompasses 30% of global Gross Domestic Product, involves 62% of the world's population and spreads through 70 countries in Asia, Africa and Europe mainly via outward FDIs (Yu et al, 2019; Fan et al, 2019). This strategical project could involve several micro-strategies and various regions, allowing China to expand its influence and its projection of power (Pavlicevic, 2018). Given the magnitude of resource mobilization, the investment in financial and political terms, this Chinese strategic project is filled with complex and contingent types of risks.

The One-Belt-One-Road (OBOR) project requires the modification of the global financial structures, rearrangements of the security and institutional landscapes both inside China and in its wider Eurasian perimeter, while it implies a different economic model than the ones observed in the so-called Western democracies. The Chinese model may have a certain appeal in developing countries, especially in times of transition, either economic or political, like the one seen nowadays (Bremmer, 2019). Combined with the Chinese financial and economic fragility, the aggregate position of OBOR project will definitely bring challenging times ahead, despite the reassuring promises given to political and business leaders around the globe.

Since China today is a global challenger (Gisiger &Rogoff, 2018), in technological and financial domains, the OBOR initiative presents the highly effective platform for the analysis of the global economic challenges that arise within the context of major economic developments and colossal strategic projects. The geographical area that this project primarily aims at, is Europe and more specifically Central, Eastern and Southeastern Europe. This particular area, which in the past largely belonged to the area of the Centrally Planned Economic Paradigm, has received after its transition to the Open Market Paradigm, significant FDIs originated from the West. Now within the context of the OBOR project, the particular area, among others of the same project, already receives and will receive further significant Chinese FDIs (Vangeli, 2017), which as in the past with the Western ones, will have certain spillover effects (Vangeli, 2020; Pavlicevic, 2018). For this reason, the focus of the proposed research is on the related developments taking place on this specific geographical area.

Scope of Research:
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This project will focus on the following research ideas:

- The macroeconomic spillover effects of the FDIs from the OBOR initiative and of the Western origin in Central, Eastern and Southeastern Europe.
- The microeconomic impact of the FDIs in Central, Eastern and Southeastern European countries participating in the OBOR initiative.

Methodology proposed:
The research project will be tackled using advanced quantitative methods as well as case studies by using macro/microeconomic and financial data about Central, Eastern and Southeastern countries participating in the OBOR initiative.

Further Reading:
Pavlicevic, D, (2018). "A Power Shift Underway in Europe? China’s Relationship with Central and Eastern Europe under the Belt and Road Initiative”, in Mapping China’s ‘One Belt One Road’ Initiative, Palgrave, https://doi.org/10.1007/978-3-319-92201-0

Supervisors:
Prof. Mark Freeman is a Professor and Dean of The York Management School at the University of York, UK.
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Dr Adriana Cornea-Madeira is a Senior Lecturer at The York Management School at the University of York, UK.

Dr Nick Huberts is a Lecturer at The York Management School at the University of York, UK.

Dr Sotirios Bellos is an Associate Professor at the Business Administration and Economics Department at CITY College, University of York Europe Campus.

Dr Petros Golitsis is an Assistant Professor at the Business Administration and Economics Department at CITY College, University of York Europe Campus.
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**Topic 4: Reactive Code Generation from Modular Software Models**

**Description:**
Model-based software engineering (MBSE) is the practice of elevating domain-specific models to first-class artefacts of the software engineering process, using such models to analyse, simulate and reason about properties of the system under development, and eventually auto-generate (a part of) its implementation.

MBSE is used extensively in organisations that produce business- or safety-critical software (e.g. in the aerospace, automotive and robotics industries), where defects can have catastrophic effects or can be very expensive to remedy (e.g. require large scale product recalls).

In a model-based software development environment, code generators are used to transform software models (e.g. structural models, behavioural/state machines, Simulink control models) to working software code. As models grow in size, re-running a code generator in its entirety for every small change in its input model is wasteful and can significantly slow down the software development process. To address this problem, previous work [1, 2] has proposed techniques for incremental/reactive execution of model-based code generators. To achieve incrementality with these techniques, a code generation engine needs to be able to tell what changed in the model (at a very fine and precise level), which can be quite expensive in its own right and can quickly become a bottleneck for large monolithic models.

The aim of this project is to design and implement new intelligent reactive model-based code generation techniques that are optimised for modular models which are split over multiple, smaller interconnected files [3, 4] (as opposed to single-file monolithic models), and exploit facilities present in contemporary software development workstations (e.g. multi-core processors, solid-state drives).

**Further Reading:**

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Antonio Garmendia, Esther Guerra, Juan de Lara, Antonio García-Domínguez, Dimitris Kolovos, Scaling-up domain-specific modelling languages through modularity services, Information and Software Technology, Volume 115, 2019, Pages 97-118, DOI: https://doi.org/10.1016/j.infsof.2019.05.010

Area:
Model-Based Software Engineering, Automated Software Engineering, Computer Science

Supervisors:
Dimitris Dranidis is an Associate Professor and Academic Director of Postgraduate studies in the Computer Science Department of CITY College, University of York Europe Campus.

Dimitris Kolovos is a Professor of Software Engineering in the Department of Computer Science at the University of York, where he researches and teaches automated and model-driven software engineering.
Topic 5: Automated verification and self-adaptation of service-based applications

Description:
Software applications are increasingly composed of third-party services available over the Internet. Reacting to failures of those third-party services by dynamically adapting the service consumer software becomes a key enabler for ensuring reliability, performance and other quality-of-service (QoS) requirements. Such requirements are especially significant in the setting of the “Internet of Services” or “Internet of Things”, where applications are increasingly composed of third-party services, which are not under the control of the service consumer. Accordingly, the services should be (re-)checked during the operation of the serviced-based application (SBA) to detect failures, thus triggering an appropriate response and reconfiguration.

There are many important challenges that need to be tackled to solve the problem of dynamically reacting to failures in SBA. The first problem is determining when to adapt, which is especially challenging in the presence of conversational services. A conversational service might fail in the middle of an invocation sequence, in which case adapting the software might be costly; e.g., due to the necessary state transfer to an alternative service. The second problem is the problem of adaptation itself; the SBA should be able to self-repair either by changing its internal behaviour or by replacing a constituent failed service with another candidate service. The third problem is the automated verification of the identified candidate service before its “hot” replacement.

Driven by recent advances in online testing of SBA, QoS requirement verification using runtime probabilistic model checking, and uncertainty quantification at runtime using machine learning, this PhD project will develop practical techniques that support (i) timely detection of service failures, thus enabling the SBA to be proactive; and (ii) verified SBA self-adaptation, thus providing guarantees that the SBA complies with its QoS requirements during operation.

Supervisors:
Dr Simos Gerasimou is a Lecturer (Assistant Professor) at the Department of Computer Science at the University of York, UK.
Dr Dimitris Dranidis is an Associate Professor and Academic Director of Postgraduate studies in the Computer Science Department of CITY College, University of York Europe Campus.
Topic 6: Formal Modelling of Artificial Emotions in Intelligent Agents

Description:
Intelligent agents are software artefacts that exhibit intelligent behaviour based on their beliefs about the environment they inhabit, their goals and the capacity (set of actions that they can perform to change their environment). Formal modelling refers to the use of mathematical notation (e.g. set theory and logic) that is able to create a rigorous and precise model of a software artefact, thus being able to prove its properties. In certain situations and applications, intelligent agents should be infused with artificial emotions that would stimulate emotional reactions to environmental stimuli. The aim of this research topic is to identify and develop a suitable formal method that would facilitate modelling of such agents. The research may involve investigation of modelling emotions, moods, personality and contagion, as they are researched in Psychology. The candidate should possess a good mathematical and/or Computer Science background that would help him or her to carry out the research more effectively. The domain for applying the modelling could be chosen by the candidate and can include emergency evacuation, agent-based economics, social network interaction etc.

Supervisors:
Dr Daniel Franks is a Reader at the Computer Science Department at the University of York, UK

Prof. Petros Kefelas is a Professor in Artificial Intelligence at the Computer Science Department at CITY College, University of York Europe Campus.
Topic 7: Neurocognitive mechanisms of the differential outcomes training effect in humans

Description:
This topic fits within CITY’s strategic research goal of further developing cognitive neuroscience research. With regard to its long-term impact and implications/potential applications, it can be also viewed within the broader context of mental health, since the phenomenon under investigation has been shown to have important practical applications to enhance cognition in several clinical populations including dementia. The topic also closely aligns with the University of York Department of Psychology’s research strategy to expand our understanding of mind, brain, and behaviour and conduct research that has the potential for impact beyond academia.

Call background:
The beneficial effect of arranging outcomes differentially, where each outcome is specific to a particular stimulus or stimulus-response association that must be learned (Differential Outcome training, DOT), was first discovered by Trapold (1970) in rodents. In humans, the DOT has been shown to be an effective tool to improve discriminative learning, spatial working memory, face recognition and long-term retention in several populations with and without cognitive impairments, such as in children, people with mild cognitive impairment and dementia (Esteban et al., 2015; Vivas et al., 2018). Applied research has consistently shown that this relatively simple technique, which is based on basic principles of learning and reinforcement, works (medium to large effect sizes, McCormack et al., 2019). However, we know little about the underlying cognitive and neural mechanisms in humans. Research in rodents suggests that learning under differential outcomes may be associated with distinct memory processes (Savage et al., 2004, 2007; Ramirez and Savage, 2007; Savage and Ramos, 2009). Whether these processes also underpin the DOT effect in humans is not known. Further, we know little about whether learning is driven by conscious awareness is humans (i.e., explicitly learning the differential outcome). The proposed PhD will reveal the cognitive and neural mechanisms underlying the DOT effect in humans using experimental/behavioural and neuroimaging (EEG) methods.

Scope of Research:
This PhD may address the following overarching research questions:

● How is the outcome represented and re-activated in memory in DOT?
● Is explicit, conscious, knowledge of the outcome associated with the stimulus and response important for the DOT effect in humans?

Methodology proposed:
Behavioural (experimental) methods combined with neurophysiological methods (EEG and psychophysiology).
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Supervisors:
Aidan Horner is a Senior Lecturer at the Department of Psychology at the University of York, UK.

Prof. Ana Vivas is a Professor and Research Director of the Psychology Department at CITY College, University of York Europe Campus.
Topic 8: Social interaction and prediction in ASD

Context:
Perception in social contexts is influenced by others, and is shaped by our experiences including various social and cultural contexts. The genetic makeup of an individual also dynamically influences life experiences, and plays a role in social behavior. To gain a better understanding of a polygenic disorder such as Autism Spectrum Disorder (ASD), it will be critical to identify the core strengths and difficulties in social interaction and perception. Successful social interactions rely on the sharing and understanding of a set of common mental states, together with the ability to predict the actions and behaviors of other people. When two individuals interact successfully (dyadic action), it has been proposed that they engage in a collective mode of cognition called the “we-mode” (Gallotti and Frith, 2013). The main idea of the we-mode is that co-agents represent their actions as something they are going to pursue together, as a single unit. Having a different style of cognition alters the engagement in the we-mode, as this has a pervasive influence on the awareness and knowledge of one’s self as well as our perception of others. ASD is considered to impact a person’s ability to engage successfully in social interactions and create shared representations. However, to-date the focus has been mainly on studying the deficits, rather than exploring both the strengths and the actual basis for the social difficulties. In order to develop efficient and targeted interventions, there is a need for improved research that also considers enhanced cognitive abilities in these individuals. This research will directly improve our knowledge of how individuals on the ASD spectrum create relationships with others, which will be critical for their successful treatment. Understanding these processes will require delineating how different brain systems interact to achieve shared action understanding and how these are impacted by ASD.

Project Aim:
The central aim of this PhD program will be to characterize and model the deficits, and enhanced abilities, of ASD individuals in social action perception. This will include determining how we evaluate actions at multiple levels of understanding, predict the actions of other individuals and experience actions during dyadic social interactions. This project is an excellent opportunity to gain a deeper understanding of how different styles of cognition impact social interaction and joint action. The project will involve training in a range of techniques psychological and neuroscientific techniques including the use of motion-capture, computer animation, psychophysics, neuropsychological testing and EEG.

Scope of Research:
This PhD may address the following overarching research questions:
- How cognitive style diversity influences action representations in ASD
- How does ASD impact the ability to predict the intentions of others, and enter the “we-mode”?
- In what ways can ASD enhance the perception of other peoples’ behaviour?
- What is the role of the mirror neuron system in action prediction, shared understanding during dyadic action, and ASD?
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Supervisors:
Dr Nick Barraclough is a Senior Lecturer at the Department of Psychology at the University of York, UK.

Dr Maria Tziraki is an Assistant Professor at the Psychology Department at CITY College, University of York Europe Campus.
Topic 9: The contribution of facilitation and inhibition to distraction in working memory in young and older adults

Context:
This topic fits within CITY’s and York’s strategic research goal of increasing our understanding of mind, brain, and behaviour and conducting research with potential applied impact. Specifically, the proposed topic has implications for understanding age-related decline in cognition and designing effective cognitive/behavioural interventions.

Call background:
Age-related cognitive decline is “almost universal”. Our ability to effectively ignore distractors has been identified as a basis for this limited Working Memory Capacity (WMC) (Vogel, McCollough & Machizawa, 2005; McNab & Klingberg, 2008), and an impaired ability to ignore distraction associated with healthy ageing is thought to contribute to the age-related reduction in WMC (Hasher & Zacks, 1988). Recent research has shown a dissociation between two types of distraction; distraction which occurs when we put information into WM (Encoding Distraction, ED), and distraction which occurs while information is held in WM, but no longer physically present (during the WM “delay period”; Delay Distraction, DD) (McNab & Dolan, 2014; McNab et al., 2015). For example, a person may be distracted when reading how much medication to take and putting that information into memory (ED), or when they must keep that information in mind while pouring the correct amount (DD), which could affect their ability to complete the task successfully, particularly in older age. From the attention field, we also know that selection of target information is achieved through the interplay between facilitation (enhancement) and inhibition (e.g., Vivas et al., 2015). However, these two fields of research have remained relatively segregated, and little is known about the interplay between facilitation and inhibition in dealing with distraction in WM. The present PhD call aims at understanding how specific attentional mechanisms may contribute to WMC under different distraction manipulations, and as a function of healthy aging. This call will involve experimental behavioural studies. The potential findings may inform the development of new behavioural measures to help characterise the cognitive profile of different individuals based on their inhibition /facilitation for different types of distractors.

Scope of Research:
This PhD may address the following overarching research questions:

- Are similar mechanisms involved in dealing with distraction in working memory and attentional paradigms?
- Are different attention mechanisms required for ignoring distraction during working memory encoding compared to distraction during the working memory delay period?
- Is the age-related decline in WMC related to poorer inhibition of irrelevant information, reduced enhancement of relevant information or both?
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Methodology proposed:

- Behavioural (experimental) methods.

Supervisors:

Dr Fiona McNab is a Lecturer at the Department of Psychology at the University of York, UK.

Prof. Ana Vivas is a Professor and Research Director of the Psychology Department at CITY College, University of York Europe Campus.
Topic 10: Understanding the role of personality in emodiversity and their neuropsychological correlates using EEG

Description:
Emodiversity is explained as the variety and relative abundance of the emotions that humans experience. Emodiversity also appears in the way that brain reacts to emotional stimuli, as the observed increased inter-individual variability in the recorded electrophysiological parameters. Although, there is strong empirical evidence that support the role of personality in emodiversity, in other words how our personality differences are related to our different ways of perceiving emotions, until now their relationship is not well documented. In the light of the above, the main aim of the present study is to shed light on the role of personality in emodiversity, by exploring if there is an influence of personality in the increased variability of the cerebral reactivity to affective stimuli. Experiments will include dense array electroencephalography (EEG) recorded during the passive viewing of pictures with emotional content obtained from the International Affective Picture System (IAPS). Moreover, the NEO-Five-factor-Inventory (NEO-FFI) will be used to measure the participants’ personality. Our analysis will be focused so on the ERP characteristics (amplitude and latency), as on functional connectivity networks during emotional processing, where we will measure how much of their observed variance can be explained by the variance of personality as it is recorded by NEO-FFI. Taking into consideration the theoretical resources and the previous research studies that have been conducted, the prospective data will help the deeper understanding of the relation between personality and emotion as well as to define how brain activity associated with specific personality traits and emotional stimuli. It is expected that the findings of the present study will give a small step forward for a better understanding of human emotions, while it will indicate a new methodological framework for the future affective studies. These data can also help us develop more suitable assessments and interventions for both clinical and non-clinical cases in relation to personality, as well as form a better understanding under the scope of emotional complexity and diversity

Research questions:
The main aim of the present study is to explore the relation between the observed variance of cerebral reactivity to affective stimuli (as measured by EEG) and the inter-individual variability of personality dimensions. It is hypothesized that emodiversity is positively correlated with personality, by the means that the increased inter-individual personality difference will be related with increased variability in the aforementioned electrophysiological parameters.
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Supervisors:

Prof. Tim Andrews is a Professor and Head of the Department of Psychology at the University of York, UK.

Dr Manousos Klados is an Associate Professor at the Psychology Department at CITY College, University of York Europe Campus.
Topic 11: Exploring attitudes towards native and non-native accents of spoken Greek

Description:
Subjective attitudes towards regional and social accents have long been known to affect listeners' evaluations of speakers in terms of perceived traits such as competence, honesty, intelligence, and trustworthiness. It is not surprising, then, to find that biases of this sort can lead to prejudice and discrimination that can materially disadvantage speakers of stigmatised varieties, at the same time unfairly advantaging speakers of accents which are more positively evaluated. A substantial amount of research literature has been devoted to positive and negative accent attitudes in the English-speaking world, but thus far only limited attention has been paid to the parallel situation in Greece with respect to accents and dialects of Greek. While for the most part these varieties are indigenous forms of the language which have been spoken in Greece for many centuries, the Greek-speaking community in Greece has in recent generations seen the introduction of accents influenced by the languages of immigrants to the country. The proposed PhD project will adopt methodologies used recently to good effect for studies of accent attitudes elsewhere in Europe, in particular for the Accent Bias in Britain project (ABB; accentbiasbritain.org), a recent joint venture between Queen Mary University of London and the University of York funded by the UK Economic and Social Research Council.

Supervisors:
Dr Dominic Watt is a Senior Lecturer at the Department of Language and Linguistic Science at the University of York, UK.

Dr Zoi Tatsioka is an Assistant Professor and Head of English Studies at CITY College, University of York Europe Campus.
Topic 12: The use of drama in teaching English pronunciation/intonation to Greek EFL learners

Description:
Despite the fact that pronunciation teaching has gained a renewed interest in recent years, studies have shown that English language teachers have reported uncertainty in incorporating this aspect into their classroom. Especially when it comes to employing drama in pronunciation instruction, a body of research, primarily in ESL contexts, has shown that it can have a beneficial effect mainly on students’ L2 learning of suprasegmental phenomena. However, considerably limited research has been conducted in EFL settings and particularly in Greece. The proposed Call for PhD research should investigate the effects of using drama in teaching English pronunciation, in particular intonation, to Greek EFL learners and explore its effectiveness in second/foreign language phonological acquisition.

Supervisors:
Dr Sam Hellmuth is a Senior Lecturer at the Department of Language and Linguistic Science at the University of York, UK.

Dr Vicky Papachristou is an Assistant Professor at the English Studies Department at CITY College, University of York Europe Campus.