



Middle European
interdisciplinary
master's programme in
Cognitive Science

MEi:CogSci Learning Contract

for the Mobility Semester



Erasmus+

1 Student Information

Student Name	Tiam Ghorab
Home University	Comenius University Bratislava
Student ID Number (Home University)	1335008
Degree Programme Code (Home University)	mIKVa
Host University	University of Vienna

This learning contract ensures that the ECTS credits the MEi:CogSci-student acquires at the host university will be recognised at the home university. In order to make this contract valid, please follow the procedure/steps listed below:

A Preparation phase at the home university

1. **Negotiation of Special Topic of Interest Module(s):** The student negotiates the *special topic of interest/phenomenon* (i.e., a cognitive phenomenon) they want to study and the way how they want to study it (i.e., a combination of courses, lab work, self-study, literature used) with the supervisor and/or local coordinator at the *host* university.
2. **Concrete plan of the project:** The student specifies the work-plan for the module (elements of module, milestones, deliverables, dates,...) according to the negotiations with the supervisor at the host university.
3. **Acknowledgement:** The supervisor checks the contract and gives their OK;
 - a. The **student sends the LC to the local coordinators at the home and host university** (+ cc to the supervisor)
 - i. with the agreement sentence: "I agree to this learning contract"
 - ii. as a **.pdf only**
 - iii. adding their name to the title of the document, e.g. **SurnameName_LC_Mobility**
 - iv. with an email head of this format only: LC_ < student surname, first name> _ <supervisor surname>
 - b. **Supervisor acknowledges that they accept the proposal by replying to the email.**
4. **Approval by the home university:** The local coordinator at the home university approves it or requests changes (go back to step 2)

B Mobility phase at the host university

5. **Planning of studies and courses at the host university:** Student fills out the semester contract in negotiation with local coordinator
6. Grade for the project, signature & stamp of supervisor at the host university (at the end of semester at the host university). **Projects need to be finished by the end of March latest!**
7. Signatures of the local coordinator of the host university

C Grading & recognition phase at home university

8. **Final grading & recognition:** Original signed contract & certificates/transcripts are returned to local coordinator at home university for grade recognition after the project has been finished.

In case the project/project plan changes to a substantial degree during the mobility semester the student has to inform the local coordinators at the host and home university immediately.

2 Semester Contract

S-I-CS New Trends in Cognitive Science Module: 10 ECTS				
Course Title	Course Type	ECTS	Grade (host)	Grade (home)
New Trends in Cognitive Science – The predictive coding approach to mind/cognition	SE	6		
MEi:CogSci Journal Club – Causal inference in cognitive neuroscience (neuroimaging and stimulation)	SE	4		
Module Grade				

S-I-PJ Special Topic of Interest (Project) Module: 15 ECTS				
Project Title	Supervisor	ECTS	Grade (host)	Grade (home)
The connection between neurobiological foundations of PTSD and practical approaches to treatment	Isabella Sarto-Jackson, Ph.D.	15		
Course Title	Course Type	ECTS		
Module Grade				

S-I Special Topic of Interest Module: 5 ECTS				
Second Practical Project Title	Supervisor	ECTS	Grade (host)	Grade (home)
The proximate cognitive and neural mechanisms of sexual objectification: from empathy to (pro)social behaviour	Giorgia Silani, Ass. – Prof., Ph.D.	5		
Module Grade				

Date, Stamp & Signature of Local Coordinator
at **Host** University

Date, Stamp & Signature of Local Coordinator
at **Home** University

3 S-I-PJ Special Topic of Interest (Project) Module

Learning Outcomes*

Subject specific

- Advanced knowledge and understanding of a phenomenon from the perspective of at least two disciplines

Methodological

- Ability to approach a phenomenon in an interdisciplinary manner

Generic/Instrumental

- Ability to write and follow a project plan

Systemic

- Interdisciplinary work/thinking
- Project-oriented work and organisational skill
- Critical evaluation of approaches & methods
- Quick orientation & navigation in mother and/or novel complex field
- Change of viewpoint/perspectives (intellectual mobility)
- Phenomenon-oriented thinking
- Problem-solving abilities

*as defined in the MEi:CogSci curriculum

3.1 S-I-PJ Special Topic of Interest (Project) Module – Project Specifications

3.1.1 General Project Information

Title of Specialisation Project	Supervisor	ECTS
The connection between neurobiological foundations of PTSD and practical approaches to treatment	Isabella Sarto-Jackson, Ph.D.	15
Course Title (if applicable)	Course Type	ECTS
Teamwork/Co-Student (if applicable)		

3.1.2 Summary of Topic/Phenomenon (3000-4000 characters)

Neuroscientific and biological findings are becoming increasingly important for clinical and psychotherapeutic approaches to psychopathology. While findings on the neurobiological foundations of mental disorders improve treatment of said conditions, they also reveal their exuberant complexity, thus also leading to highly complex models. In this context, neuroplastic capacities are receiving attention as a core mechanism in treatment. The latter lead to a high susceptibility to influence induced by events in the social environmental and thus to change in cognitive, behavioural, and physiological (dis-)regulation.

These complex dynamics pose a challenge to bridging the gap between neurobiological knowledge and applied therapeutic approaches to psychopathological conditions. Regarding therapeutic intervention, the conveyance of knowledge to clients suffering from mental illnesses serves a psychoeducational purpose. Supporting clients towards a more informed sense-making process of their own situation and experience is being increasingly practiced by mental health professionals, also as a way of educating clients about the route of treatment. Examples of such interventions can be observed in cognitive-behavioural therapy, where science-based approaches cannot only be used for the development of therapeutic interventions but also as a potential means to inform clients about the therapeutic trajectory. Last but not least, these practices aim to translate scientific knowledge about psychopathology into accessible narratives that fit into the client's biography and resonate with their everyday language. However, the complexity of neuroscientific and medical models and knowledge make the use of psychoeducational methods increasingly challenging.

In our research project we want to gain an overview of current approaches on bridging neurobiological and medical research on psychopathological models with the practiced therapeutic approaches. In that we touch a field that bridges neurobiological mechanisms with practical therapeutic methods and therefore many environmental factors. For this endeavour, to demonstrate the interplay of neuroplastic mechanisms and the personal environment, we focus on the phenomenon of posttraumatic stress disorder (PTSD). Since this condition is related to exposure to stressful life experiences and thus highly affects patients' biographies, it provides an interesting base for connecting neurobiology and therapeutic approaches of practitioners. Additionally, the transition of PTSD from the class of anxiety disorders during the latest and fifth edition of the DSM-V into a separate code as well as the constant research done on this disorder highlights the relevance of further unravelling ways to use fundamental research insights in practical applications.

By compiling this summary of various perspectives on the topic ranging from animal to human studies over to applied therapeutic approaches that both consider environmental factors, we aim to use neurobiological insights for reconceptualizing employable aspects for treatment in the process of neuroplasticity in PTSD. In doing so, we draw knowledge from the disciplines of neuroscience, biology, and philosophy as well as practical applications of psychotherapeutic methods and approaches.

3.2 Project Plan

3.2.1 Project Steps

Initial Literature Research (Overview)				Total Working Hours (WH)/ECTS: 25 / 1	
Working-package (WP)	Start – End	WH / ECTS	Activities	Resources required	Milestones (M)
WP Initial 1	Aug/22–Sept/22	5 / 0,2	Consultations with Isabella, narrowing down preferred topics mapped together during meetings based on initial readings and research of literature	Access to literature, Zoom	M1 IniLit1
WP Initial 2	Sept/22 – Oct/22	10 / 0,4	Reading recommended literature. Gaining an overview of theoretical conceptions of anxiety, ptsd and (para-)sympathetic behavioural responses	Literature via uni- & scientific journal databases	M1 IniLit2
WP Initial 3	Sept/22 – Oct/22	10 / 0,4	Writing notes on literature, creating a map of ideas and annotated bibliography	Literature via uni- & scientific journal databases	M1 IniLit3

Formulating Research Question and Theses				Total WH/ECTS: 62,5 / 2,5	
Working-package (WP)	Start – End	WH / ECTS	Activities	Resources required	Milestones (M)
WP Theses1	Oct/22-Oct/22	25 / 1	Formulation of preliminary research question for guiding the project	Literature, Consultations, Zoom	M2 Thes1
WP Theses2	Oct/22 – Early Nov/22	25 / 1	Further literature research for refining the research question	Literature via uni- & scientific journal databases	M2 Thes2
WP Theses3	Oct/22 – Mid Nov/22	12,5 / 0,5	Definition of final research question	Computer, access to literature	M2 Thes3

Focussed Literature Research & Analysis (on Sub-Topics/Concepts)				Total WH/ECTS: 100 / 4	
Working-package (WP)	Start – End	WH / ECTS	Activities	Resources required	Milestones (M)
WP Focus 1	Nov/22 – Mid Dec/22	37,5 / 1,5	Focussed, extensive literature search on animal studies	Computer, access to literature via uni- & scientific journal databases	M3 Lit1
WP Focus 2	Nov/22 – Mid Dec/22	37,5 / 1,5	Focussed, extensive literature search on neuroimaging/behavioural human studies	Computer, access to literature via uni- & scientific journal databases	M3 Lit2

Focussed Literature Research & Analysis (on Sub-Topics/Concepts)					Total WH/ECTS: 100 / 4
Working-package (WP)	Start – End	WH / ECTS	Activities	Resources required	Milestones (M)
WP Focus 3	Dec/22 – Mid Jan/22	25 / 1	Expert-Interviews with practicing psychotherapists on their view on PTSD in everyday practice & qualitative analysis	Computer, Zoom, Recording device, contact to experts	M3 Lit3

Synthesis of Findings/Insights					Total WH/ECTS: 87,5 / 3,5
Working-package (WP)	Start – End	WH / ECTS	Activities	Resources required	Milestones (M)
WP Synth 1	Dec/22 – Jan/22	25 / 1	Integration of collected knowledge & interview insights into deduced topical aspects.	Collected literature, interview analyses	M4Syn
WP Synth 2	Dec/22 – Dec/22	37,5 / 1,5	Mapping the relational structure of the various topical strands.	Collected literature, literature on methods on knowledge synthesis	M4Syn
WP Synth 3	Dec/22 – Dec/22	25 / 1	Hierarchical and chronological structuring of findings	Collected literature, literature on methods on knowledge synthesis	M4Syn

Project Documentation					Total WH/ECTS: 100 / 4
Working-package (WP)	Start – End	WH / ECTS	Activities	Resources required	Milestones (M)
WP Doc 1	Oct/22 – Jan/23	15 / 0,6	Documentation of project progress through short summaries of topical sections or description of research activities	Computer	M5Doc
WP Doc 2	Oct/22 – Jan/23	10 / 0,4	Monthly discussions and reports on project status	Consultations, Zoom	M5Doc
WP Doc 3	Dec/22 – Jan/23	75 / 3	Composing 7-page project paper comprising insights found	Computer, collected resources, access to literature databases	M5Doc

3.2.2 Project Milestones

Mile-stone	Result/"Product" and/or Deliverables
M1 IniLit1	Topics of interest for the research narrowed down and read recommended literature
M1 IniLit2	Created an overview of subtopics of interest for the research topic
M1 IniLit3	Created an annotated bibliography based on initial literature research
M2 Thes1	Preliminary research question stated
M2 Thes2	Research question (re-)defined and revised
M2 Thes3	Final research question formulated
M3 Lit1	Extensive literature on animal studies collected
M3 Lit2	Extensive literature on human studies collected
M3 Lit3	Interview transcripts & analysis
M4Syn	Structured findings in topical packages
M5Doc	Project Documentation & report finished and project paper written

3.3 Short Project Report (~1 page, 3000-5000 characters)

Final Grade for the Project

____ / ____

Host Grade / Home Grade
(see grade conversion matrix on last page)

Date, Stamp & Signature of Supervisor (Host University)

3.4 S- I Special Topic of Interest Module (second project)

3.4.1 General Project Information

Title of Specialisation Project	Supervisor	ECTS
The proximate cognitive and neural mechanisms of sexual objectification: from empathy to (pro)social behaviour	Giorgia Silani, Ass. -Prof., Ph.D.	5
Course Title (if applicable)	Course Type	ECTS
Teamwork/Co-Student (if applicable)		
Monika Kraškovic and Jennifer Kubitzek		

3.4.2 Summary of Topic/Phenomenon (3000-4000 characters)

Sexual violence is a prominent and widespread problem for women worldwide. Prior research has suggested that empathy for victims of violence might be an essential component that determines further violent behavior or prevents pro-sociality towards affected individuals. Empathetic capacities have been often suggested to be a core component to predict pro- or anti-social behavioral tendencies and a reinforcing factor for altruistic behavior. Reduced empathy for victims of such acts could be a product of reducing the victim to their physical appearance or body features, defined as sexual objectification. Thus, it is thought that sexual objectification results in a reduced or altered perceived humanness of the counterpart and hence, reduces the empathic capacities individuals are able to share with a sexually objectified person. This outcome, in turn, increases the potential for violent acts or antisocial attitudes towards sexually objectified individuals. As a consequence, violence against individuals is considered less severe when sexually objectified or the responsibility for the causes of the violent outcomes is partially attributed to the victim which can even result in blaming them for being attacked or harmed. Furthermore, these dynamics of sexual objectification can also result in participants being more susceptible to prioritize sexually objectified individuals over non-objectified ones when inducing harmful treatment during experiments. Finally, albeit the issue of violence is much more pressing for women, men are also affected by sexual objectification to an increasing amount.

This research project tackles the question of how sexualized perception of individuals as objects impacts behaviors towards them. As there is a research gap in our understanding of how sexual objectification affects (pro-)social behavior, this study touches upon a problem that is imperative for the further comprehension of attitudes and behavioral responses towards victims of sexual and physical violence.

In doing so, the crucial aim of this project is to investigate this relationship in a research design simulating more realistic dynamics that are closer to processes occurring in real life situations than hypothetical scenarios previously used in research. Thus, an interdisciplinary multi-method approach including methods from social, cognitive and experimental psychology as well as state-of-the-art neuroscience will be applied. By doing this, the researchers aim to generate a novel and comprehensive understanding of this phenomenon on the individual level and gain further insight into the mechanisms responsible for sexual objectification and its social consequences.

By participating in this project, I aim to get insights into applied experimental social and cognitive psychological and neuroscientific research. Finally, my interest in the bridge between psychotherapy and neuroscience also touches this phenomenon by gaining deeper understanding in the foundations and consequences of sexual objectification as these dynamics are a widespread problem across society.

3.5 Project Plan (second project)

3.5.1 Project Steps

Literature Research			Total Working Hours (WH)/ECTS: 12,5 / 0,5		
Working-package (WP)	Start – End	WH / ECTS	Activities	Resources required	Milestones (M)
WP Literature	October/22 - October/22	12,5 / 0,5	Getting an overview of the phenomenon and study design by reading the ethics committee application and study instructions	Access to literature, to the project descriptions and study design	M1 Lit

Formulating Hypotheses/Theses			Total WH/ECTS: 12,5 / 0,5		
Working-package (WP)	Start – End	WH / ECTS	Activities	Resources required	Milestones (M)
WP Theses	Oct/22 - Oct/22	12,5 / 0,5	Getting an overview of the standing hypotheses and understanding why they were made	Access to literature, data bases and the study design	M2 Theses

Planning Means of Data Acquisition			Total WH/ECTS: 50 / 2		
Working-package (WP)	Start – End	WH / ECTS	Activities	Resources required	Milestones (M)
WP Plan	Oct/22 – Late Nov/22	50 / 2	Participating during the scanning sessions once – twice a week and learning how to set up the eyetracker and run the stimuli via Matlab, getting familiar with the code and procedure	Access to lab computer, own computer for research on Matlab, to participants, discussions with instructor	M3 Plan

Data Acquisition/Collection			Total WH/ECTS: 25 / 1		
Working-package (WP)	Start – End	WH / ECTS	Activities	Resources required	Milestones (M)
WP Data	Dec/22-Feb/23	25 / 1	Independently running the experimental stimuli via Matlab	Access to lab computer, to participants	M4 Data

Data Analysis/Interpretation				Total WH/ECTS: 12,5 / 0,5	
Working-package (WP)	Start – End	WH / ECTS	Activities	Resources required	Milestones (M)
WP Analysis	Late Oct /22 – Feb/23	12,5 / 0,5	Observation of data present at the respective point in time	Access to the participants and study data	M5 Analysis

Project Documentation				Total WH/ECTS: 12,5 / 0,5	
Working-package (WP)	Start – End	WH / ECTS	Activities	Resources required	Milestones (M)
WP Doc	Oct/2022 - Feb/23	12,5 / 0,5	Finalizing the project report based on continuously written short notes & reflections throughout the participation period	Computer	M6 Doc

3.5.2 Project Milestones

Mile-stone	Result/"Product" and/or Deliverables
M1 Lit	Got an overview of the phenomenon, research purpose and study design
M2 Theses	Understood the role of the standing hypotheses and understanding their roots
M3 Plan	Learned to run the experiment and understanding the code and procedure
M4 Data	Gained the ability to roughly navigate through the Matlab code and running the experiment independently
M5 Analysis	Written reflections of the present behaviour of participants and present data
M6 Doc	Completed the Learning Contract and project report

3.6. Short Project Report (~1 page, 3000-5000 characters)

Final Grade for the Project

____ / ____

Host Grade / Home Grade
(see grade conversion matrix on last page)

Date, Stamp & Signature of Supervisor (Host University)

Grade Conversion Matrix

BRAT		BUD		LJUB		VIE		ZAG	
A	výborne (excellent)	5	jeles (excellent)	10	odlično (excellent)	1	sehr gut (excellent)	5	odličan (excellent)
B	vel'mi dobre (very good)	4	jó (good)	9	prav dobro (very good)	2	gut (good)	4	vrlo dobar (very good)
C	dobre (good)	4	jó (good)	8	prav dobro (very good)	2	gut (good)	4	vrlo dobar (very good)
D	uspokojivo (satisfactory)	3	Közepes (fair)	7	dobro (good)	3	befriedigend (satisfactory)	3	dobar (good)
E	dostatočne (sufficient)	2	Elégséges (satisfactory)	6	Zadostno (sufficient)	4	genügend (sufficient)	2	dovoljan (satisfactory)
F	nedostatočne (insufficient)	1	Elégtelen (fail)	5	nezadostno (insufficient)	5	nicht genügend (insufficient)	1	nedovoljan (insatisfactory)