24. OKTOBER 2017

FINAL REPORT: MITACS GLOBALINK INTERNSHIP JUL-OCT 2017

UNIVERSITY OF REGINA, SASKETCHEWAN

LUISE ZÖRLEIN
Osnabrück University

Table of Contents:

- 1. General
 - a. Prior to arrival
 - i. Work permit application
 - ii. Plane ticket
 - b. Post arrival
 - i. Getting work permit at the airport
 - ii. Social Insurance Number
 - iii. TD Bank account
 - iv. My Mentor & the first days
- 2. The Internship
 - a. The Study
 - b. My work
- 3. Conclusion

1. General

After my admission to the programme I immediately stared to organise my stay in Canada – the earlier the better, I thought. There are so many important things to think about. To not get mixed up I made sure I wrote down everything important on a list.

There were a lot of small things I had to think about, which nearly slipped my mind. Buying an adapter so I could use my chargers with a German plug on them. Pre-ordering some Canadian Dollars at the bank so I could change some money (most of the banks require an ordering of how much money you want to change, because most of the times they do not have a lot of money in a foreign currency available for changing).

1.1 Prior to arrival

The application for the work permit was a bit cumbersome. I filled out all the details they asked for on the webpage, and always checked with fellow students that also got the Mitacs scholarship, if they had done the same things. For the documents, I should upload I always uploaded filler documents — like my matriculation certificate instead of a written statement of my employer. In the end, I uploaded a letter of explanation which explained the program and that also included the statement of Mitacs concerning the Globalink programme. A couple of weeks later my application was accepted and I received the "Letter of invitation" — which I needed to show the officer at the airport in order to get the actual work permit. It was a bit annoying to hear that, after I finished the application process, they changed the law such that German research students don not need a work permit anymore — but I still had to do the application. For this process, the Facebook group of the German Globalink students was very helpful to exchange experiences with the others, which already arrived in Canada, or that were at the same organisation-step as I was.

Mitacs states somewhere on their documents that you should not buy a plane ticket before the work permit application was approved, so I did not — which was a mistake. The tickets get more expensive the later you buy them. If I had to do it again, I would have book the ticket earlier. I took a plane from Amsterdam to Toronto and from there one to Regina.

In Toronto, I had 2 hours between the flights in which I needed to get the work permit. There were not many people and the whole process was very easy. The officer was super friendly, asked what I was going to do in Canada, how long I would stay and so on. In the end, he did not really want to see any of the documents in prepared in order to get the work permit. Make sure, however, that you have them with you anyway - just in case your officer will want to see it! I also went to get my social insurance number right at the airport — so if you have enough time, you can get it there already. This process was also very unproblematic and a couple of minutes later I took the next plane which brought me to my final destination "Regina".

1.2 Post arrival

My Globalink mentor picked me up from the airport by taxi and went to Residence Services at university with me, since I was staying in a student dorm on campus. He helped me getting my key and finding my apartment room. On the next day, after catching up with some sleep (I had been awake for almost 24 hours) he showed me around Campus and we checked out where I needed to go to meet my supervising Professor. Unfortunately, he missed to book an appointment with TD Bank for me to open up a bank account, but since they had walk-in time on the next day I just went there alone. I needed my work permit and passport for the registration of my New-To-Canada bank account that was recommended by Mitacs.

Of course, I did upload the bank details and work permit information to the Globalink Portal as soon as a could so there would not be any delays with the reimbursements.

The first days were quite busy organising stuff like the bank account, the student card or getting a mailbox assigned, as well as getting myself equipped with kitchen utensils and the like. I was glad that I arrived a couple of days before my internship actually started. Adjusting to the lifestyle at my university took me a while, but after one week I was all settled in — I met a couple of people, knew where to find things like the laundry facilities, garbage room or the good places to eat. I checked out the gym on campus, that is free to use for students, and I also got a good overview of the project I would be working on for the next months.

2. The Internship

2.1 The study

My internship was located in the department of psychology with professor Jeff Loucks, a developmental psychologist. He showed me around in the small lab and introduced me to my colleague Taline. She ran the experiments most of the times, since Jeff was often busy writing papers. None the less he was very supportive and interested in me having a good experience and good insights in research. The study I would be working on for the next three months involved 4- and 5-months old babies. We were interested in how infants understand grasping actions of another person as they get better in grasping themselves. At the point when babies could grasp things better, they would rather prefer the way someone else picks up a toy (configural features) and pay less attention on how they move the object (spatial features). We wanted to find out what causes this change – is it just the normal development of children, or is it actually the gaining of motor abilities?

The study involved four appointments in our lab for the parent(s) and the infant. In the first and the last stay the baby would perform the same tasks, so that we could measure and compare the data collected in the beginning and the end. The tasks in between were, for half of the babies, a visual experience task (control condition), for the other half a motor-experience task (experimental condition). Comparing the data form the first and last visit, we hoped to find that the babies in the experimental condition show more interest in configural features instead of spatial features, than the infants in the control condition.

The first and last experiments involved the baby watching a short sequence of films where a person performed a simple action (moving a toy across the table). The infant got first habituated to the general stimulus. Then the films changed and the person would one time grasp the object differently or move it on a different path. Measuring the looking time of the baby for each of the conditions showed us how interested the infant was in which of the features. The second thing was, to measure the child's grasping ability by presenting it with four little wooden balls the child had to grasp, varying in size and colour.

The two appointments in between held a different task. Here the babies were divided in control and experimental group. In the control condition, the babies sat in their parent's lap, while the parent was moving some blocks in front of them — on eye-level or table level. The infants were not supposed to grasp the objects, the experience was supposed to be only a visual one. In the experimental condition, the baby was equipped with "sticky" mittens. Small mittens with the soft part of Velcro attached to it. The baby sat in the parent's lap at the table, the experimenter sat on the other side of the table putting a block in front of the baby, encouraging it to grasp the block, which had the stick part of the Velcro attached to its sides. Infants that age are usually not yet able to grasp objects themselves in a controlled way. The mittens should give the baby some kind of grasping experience, when they were reaching for the object. All experiments were recorded on camera, for further analysis.

With the results of the two conditions we hoped to find out if the change in perception was due to the enhanced motor abilities, or just a general development that only co-occurred with the grasping abilities of infants.

2.2 My work

I had different obligations in the lab. In the beginning, I assisted the lab-manager Taline with all the small things that are to be done in a research lab: saving the video files, preparing the money and documents for the participants, cleaning the blocks (babies kept putting them in their mouth), sowing the mittens, taking down notes about the performance of babies in the various experiments, setting up the camera and stopping the time during the experiments. I also called the participants that signed up on our webpage, to book appointments with them. In the second week, I was introduced to coding the looking times of the baby while they were watching the videos. From the 4th week on I also performed as an experimenter for some of the participants, presenting the babies with the wooden balls and the blocks, while Taline was assisting me. It was a great responsibility, but Jeff and Taline helped me out, and check that I always felt comfortable with what I was doing. After 6 weeks of my internship I ran most of the experiments myself and were quite confident about what I was doing. I managed the lab business and processed the videos of the action task, where babies had to grasp the wooden balls, so Jeff could check for the results. Here I had to count how many attempts the baby took to grasp the ball, and if they finally got the ball, or not. With those two numbers, success (0=no, 1=yes) and the number of attempts, we could calculate the grasping-efficiency of the baby, which was important to determine if the baby actually got better at grasping compared to the first assessment.

Unfortunately, my internship was over before we could run all participants and do the data analysis to find out if our findings supported the hypothesis or not. But a first correlation, performed with the data of only half of the participants showed a positive correlation of grasping efficiency and perception preference. Meaning the better the babies got at grasping the more they were interested in the hand change of other people's actions. We have to wait for the final results to find out if that result holds over all participants.

3. Conclusion

It was very interesting for me to see of how many things you have to take care when running such a study. At first you have to control for several aspects in the study design like confounding variables. You have to design the study in a way that allows you to collect comparable data of a control and an experimental condition. The second most difficult thing is the participants. Infants are not controllable in what they do — so you have to find a study design which allows you to measure the data that helps your research, but at the same time, is easily and reliably retrievable from the infants. Also, you have to keep in mind that anything can happen. If the child gets upset and starts crying for whatever reason, you cannot measure any data — luckily this did not happen too often for our study. The experiments were short enough to keep the child's interest and to not exhaust it either. But if the child does not want to look at the video at all, or does not try to grasp the wooden balls there is just nothing you can do to get your data.

I am very thankful that I got this amazing opportunity to put my own hands on real research for the first time and for the great support that Mitacs and the DAAD, as well as the International Office at the University of Regina, offered me in advance of and during my stay in Canada.

