

visiting scholar grant report

Examining the effects of multiple implementation intentions

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I am a final year PhD student from Utrecht University. In my research, I focus on using implementation intentions in interventions aiming to change unhealthy snacking habits. My PhD has been significantly influenced by the research of Professor Paschal Sheeran. Naturally, when I attended one of his presentations at the EHPS conference 2012 in Prague, I took the opportunity to introduce myself and to talk to him about his research. Fortunately, he showed a lot of interest in my research. In the few minutes that we discussed my studies, I became even more enthusiastic about my PhD project and I left with a lot of new research ideas.

Back in Utrecht, after discussing my experiences with my supervisors, we thought it might be valuable for me to spend some time at another university. Visiting another university would provide me with the opportunity to expand my knowledge and develop myself as a researcher even further. So, I sent Prof. Sheeran an email requesting to collaborate and spend some time at the University of Sheffield. He responded positively. Moreover, he proposed that Dr. Thomas Webb could co-host my visit as well. As the research I was working on built greatly on Dr. Webb's theoretical framework and research, I was very pleased to be given this opportunity. We agreed that I would visit the University of Sheffield for a two month period. Shortly after, I applied for an EHPS Visiting Scholar Grant and I was very happy when our application was accepted.

Our research

I visited the University of Sheffield between April and May 2013. The main purpose of the visit was to closely collaborate on studies and expand the line of research I am currently working on. To elaborate a little more on this: the project concerned the use of multiple implementation intentions to change undesired existing habitual behaviours, such as unhealthy snacking behaviour. Implementation intentions (specific 'if-then' plans) are found to effectively change unhealthy snacking habits by replacing the unwanted behaviour (like eating chocolate when feeling bored) with a healthier response (eating an apple, for example). In this way, a plan can be formulated linking the critical situation that was formerly inducing the unwanted response to a favourable alternative (e.g., 'If I am feeling bored, then I will eat an apple!'). So far, research has mostly been concerned with the effectiveness of a single plan. Yet, unhealthy behaviours such as snacking are often induced in various situations; not only does someone eat unhealthy snacks when feeling bored, for example, but perhaps also when watching television, or when being at a party. Indeed, many behaviour change interventions use multiple plan paradigms to target behaviour in different situations. For example, participants are asked to identify three situations that trigger their habit of eating unhealthy snacks and are asked to formulate three different if-then plans, targeting each of these situations. However, in my research I found that implementation intentions are less

effective when multiple plans are formed at once compared to making a single plan. Therefore, one of my research projects is aimed at gaining more insight into the processes underlying these findings.

In that previous study, we found that making multiple implementation intentions targeting the same behaviour (like unhealthy snacking) is less effective for successful goal pursuit than making a single plan, but that making additional yet unrelated implementation intentions (targeting academic achievement) did not affect the effectiveness of the one relevant plan. Our results suggested that the 'dilution effect' of multiple implementation intentions does not occur as a result of merely formulating multiple plans, but arises when acting upon those plans. We hypothesised that making multiple plans for the same goal (unhealthy snacking) might activate similar, competing mental pathways. Consequently, this could result in weaker associations between the critical cue and the alternative response compared to when multiple plans are formulated for unrelated goals (snacking and academic achievement). The study conducted in Sheffield was designed to examine this hypothesis and to address possible mechanisms underlying this effect. In addition, we aimed to identify the circumstances under which these dilution effects remain absent and to examine how the effectiveness of multiple plans could be enhanced.

Visiting the University of Sheffield

During my visit, Prof. Sheeran, Dr. Webb, and I engaged in weekly meetings. Prof. Sheeran and Dr. Webb were enthusiastic and motivating, and I enjoyed these meetings a lot. Yet, it was quite a challenge for me to keep up with them as both were talking and thinking incredibly fast. We

set up a study which I conducted at the university during my stay. In addition, I had the possibility to join their research group meetings, in which research and/or methodological issues and solutions were discussed. I also got the chance to attend several presentations and to visit the PhD conference which was held at that time. Apart from collaborating with Prof. Sheeran and Dr. Webb, it was also a great experience to be part of another research group and to connect with PhD students and staff from another university. My visit to Sheffield involved quite some hard work but also a lot of fun, including the occasional trip to the beautiful Peak District and the typical English afternoon tea breaks with the other students and staff.

Spending time at another university and working together with Prof. Sheeran and Dr. Webb provided me with a unique opportunity and a great learning experience. It was an honour to collaborate with such influential scholars. Moreover, it was valuable to be able to visit a research group outside my own university and to gain international experience in conducting research at another university. This visit, which could not have been realized without the EHPS visiting scholar grant, provided the opportunity to develop myself as a researcher, contributed positively to my PhD research, and laid the foundations for future collaboration.

I would like to take this opportunity to thank Paschal and Tom again for being so welcome and such great supervisors during my stay. In addition, I would like to extend special thanks to my supervisors Dr. Marieke Adriaanse, Prof. Denise de Ridder, Dr. Emely de Vet, and Prof. Bob Fennis, for supporting and facilitating this visit.



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