**Introduction**

Decision-making had for a long time been studied independently from memory processes. Initial paradigms were relatively simple: participants were told explicitly what choices they have and what they involve (e.g. receive 5$ or have a 50% chance to receive 10$). These decisions from description do not require recalling information from long-term memory; however, in our daily lives, we often must choose without being told exactly what the outcomes and probabilities of each options are. What we prefer to eat, which products we decide to buy or even whether we take the metro or the bus to get to work today are all decisions that rely, at least partially, on what we remember from taking these decisions previously. It eventually became clear that these decisions learned from trial-and-error are quite different from decisions learned from description (Kahneman & Tversky, 1979). Since then, a lot of efforts have been spent in trying to understand how people choose using their previous experiences as a guide (\*citations to be added\*). However, memory is far from being a perfect recollection of what happens (Schacter, 1999) and the mechanisms behind decision-making might very well depend on how memory functions.

For a long time, episodic memory has been thought to be a form of declarative memory specific to the moment and place it was acquired (Tulving, 1983, 2002). For example, remembering a talk you had last time you went to your favorite restaurant is a form of an episodic memory. Episodic memory is now seen as one of the major neurocognitive memory systems (Tulving, 2002), mainly compromised of the hippocampus and its related structures (Milner & Klein, 2015). It has been distinguished from semantic memory (Tulving 1972; 1985), which is another aspect of declarative memory not necessarily attached to any specific event and concerned with remembering more general information about the world.

The episodic specificity induction is an experimental procedure where participants are briefly trained in recollecting details of recent experiences (Madore et al., 2016; Madore, Jing & Schacter, 2016; Madore & Schacter, 2016; Jing, Madore & Schacter, 2016; Madore, Gaesser & Schacter, 2014; Madore & Schacter, 2014; Madore, Addis & Schacter, 2015; Schacter & Madore, 2016). The episodic specificity induction has previously been used in supporting the Constructive Episodic Simulation Hypothesis: the idea that episodic memory does not only play a crucial role in reconstructing one’s own past experiences, but also in imagining future events (Schacter and Addis, 2007). The episodic specificity induction has been shown to increase the amount of recalled internal (episodic) details on the Autobiographical Interview, but not the amount of external (semantic) details recalled and imagined (Madore, Gaesser & Schacter, 2014). More importantly, the effect of the episodic specificity induction generalized to the amount of details generated in imagining the future. This suggests that recalling the past and imagining the future both rely on episodic memory (Madore, Gaesser & Schacter, 2014). The episodic specificity induction has also been shown to improve performance on various cognitive tasks, such as divergent thinking (Madore et al., 2015) and the ability to solve hypothetical social problems (Madore and Schacter, 2014).

Since what we choose depends on what we think will happen, it seems plausible that episodic memory plays a role in decision-making. There are also several other reasons to think that episodic memory is involved in making decisions from experience. Murty, FeldmanHall, Hunter, Phelps and Davachi (2016) found that participants had to remember previously learned associations between lotteries and experienced rewards to choose lotteries adaptively. Wimmer and Shohamy (2012) have shown rewards associated with certain items to spread to other similar but previously unrewarded items, such that participants started choosing rewards that previously had never been rewarded. Duncan & Shohamy (2016) found that showing familiar scenes induced episodic memory use and made participants more likely to remember and chose high-valued objects they had encountered before. Madan, Ludvig & Spetch (2014) have more specifically investigated the role of memory in learning decisions from experience. They hypothesized an extreme-outcome rule where extreme outcomes in risky choice are remembered with more salience (Talarico & Rubin, 2003) and hence are given more weight when choosing from experience. Since people value losses more than wins (citations?), heavy loses should be better remembered than heavy wins, making people more risk-seeking for wins than for loses. This theory is supported by recent findings which have found people to be more risk-seeking for wins than for loses in decisions from experience (Ludvig, Madan & Spetch, 2014). To test their hypothesis, they designed a task where participants choose from experience between two options. Participants learn from experience to choose between a moderate gain and a 50% chance to give double the amount and a 50% chance to give nothing. They also had to learn to choose between a moderate loss or a 50% chance to lose double or nothing. At the end of the experiment they asked participants what was the first outcome that came to their mind for each option. Consistent with the extreme-outcome rule, people who remembered the high reward from the gain choice with risk were more risk-seeking in positive choices, and people who remembered the heavy loss from the risky loss choice were less risk-seeking in loss choices. This effect did not generalize to choices from decision (Madan, Ludvig & Spetch, 2016), suggesting that memory for extreme-outcome specifically influences risk-seeking in decisions learned from experience and not for the ones learned from description.

The current study aimed to experimentally evaluate the role of episodic memory in decision-making. To do so, we used the episodic specificity induction of Madore and Schacter (2014) to increase episodic memory, followed by the decisions from experience paradigm developed by Ludvig, Madan and Spetch (2014).