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An Exploration into the Role of Memory for Fiction – A Scoping Review Protocol

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INTRODUCTION

Review question / Objective This scoping review has been created with the intent to explore the role of memory for fiction throughout individuals lives. Sources of fiction are an ever-growing pastime individuals enjoy engaging with. Novels, TV shows, movies and games all provide us with fictional event memories. These memories are unique in that they can be re-experienced, making memory for fiction an intriguing phenomenon (Schubert, 2022). Memory for fiction has not been heavily explored in research, and this is something that this scoping review aims to bring to light. However, the main objective is to pave a path for further research into this phenomenon by providing future researchers with an up-to-date account of current research that has been conducted and subsequently, the results of others research. To appropriately assess knowledge on the current research topic from a broad perspective, key concepts and definitions were considered and the following research question was established:

• What does current literature tell us about the impact of memory for fiction on general cognitive function?

By addressing the research question, it will be possible to collate a bank of knowledge on the topic and identify any gaps in research. To further support the research question, research objectives have been created to ensure the question is answered appropriately and with precision. By achieving the following objectives, the outcome of the scoping review will offer a structured and thorough analysis of the research across several databases. The objectives for the scoping review are:

• Identify key concepts of memory for fiction and autobiographical memory.
• Clarify any definitions of memory for fiction and autobiographical memory.
• Assess empirical research and highlight the results.
• Evaluate common methods used in this area of research.
• Determine if there are any gaps in research for future researchers.

This will be done by providing researchers with a comprehensive overview and evaluation of questions being asked and answered by other researchers on memory for fiction, methods and techniques used to assess this phenomenon, and results and recommendations for further research.

Background Memory for fiction has remained an intriguing topic for many researchers across a range of disciplines including psychology, neuroscience, and literature. Curiosity continues to peak about how this phenomenon can affect aspects of human life so greatly despite stemming from fiction. It is evident that memory for fiction is not just a way for individuals to briefly escape reality (Ravasi, 2020), it is much more than that and as fictional consumption increases and the ways in which individuals consume fiction expands, the need to explore this phenomenon becomes increasingly pressing. In the modern world, fiction dominates daily life with communities developing online, using technology as a medium for access (Dubourg & Baumard, 2022). Fiction can be found through literature, games, TV shows, and films with the information from these sources being stored as memory for fiction. This type of episodic memory allows individuals to construct scenes despite not physically taking part in the activity themselves. The development of scene construction is a requirement for event memory regardless of whether the memory stems from a real or fictional event (Rubin & Umanath, 2014). Yang et al. (2021) postulates that scenes derived from memory for fiction are vivid and therefore hold strong similarities to memories formed from real event memory. As well as the vividness of a scene constructed from real or fictional memories, links to emotions have also been explored. Hogan et al. (2022) states the emotional investment an individual has in a story or character creates a unique bond (Good and Schaab, 2022), albeit a fantastical one, increasing the emotional stimulation the individual experiences through aspects such as places and objects (Chatterjee & Vartanian, 2016). This amplifies how memory for fiction is a multifaceted occurrence with varying aspects to consider upon assessment of this phenomenon such as shaping identity and understanding, social cognition and empathy, and creativity and escapism.

Rationale In the digital age, accessing sources of fiction has become one of life's daily events. Whether it be reading a book, watching a TV series, or playing a game with friends, fiction is rising in use and popularity. Speer et al. (2009) found that engaging in fictional literature can cause brain activation similar to that of real events experienced. Using neuroimaging technology, Speer et al. (2009) identifies that individuals use specific areas of the brain to process information about characters, locations, and events. The areas that are activated to process information are those used for spatial awareness, goal orientation, and even physical manipulation of objects. Yang et al. (2021) corroborates this by comparing fictional and personal autobiographical memory, identifying that some phenomenological qualities are similar, those being visual imagery, reliving, emotional intensity, rehearsal, and belief. The impact is evident when considering how this affects future outcomes. Richardson (2010) discusses that remembering past events and imagining the future share the same neural mechanisms as memory for fiction. This is more closely examined through the Janus Hypothesis which suggests how individuals use past experiences to inform possible future outcomes (Bang, 2009; Suddendorf & Corballis, 2008). Emphasising that not only do individuals use their own past experiences to inform future decisions, but experiences from sources of fiction. This has been evidenced extensively from socio-cultural, social learning, and social-cognitive perspectives. Individuals have used fiction to assist them with social interactions, to make judgements, and to understand what acceptable behaviour in society is (Best, 2020; Hoggan & Cranton, 2014; Tamir et al., 2015). Mar and Oatley (2008) describe this as an 'immersive simulation of social interactions', a bond that is created through a parasocial relationship with a character (Calarco et al., 2017). This parasocial relationship provides individuals with social inference, the ability to understand others' thoughts and feelings.

Theory of Mind (ToM) developed by Sigmund Freud encompasses an individual's understanding of others' emotions, intentions, desires and beliefs and is a valuable cognitive skill acquired partly through memory for fiction (Kidd et al., 2016). It explains the unique ability humans possess to assess and form reason of other's thoughts and actions whilst also providing a scaffolded framework for learning (Kidd & Castano, 2013; Nikolajeva, 2019). This further establishes how memory for fiction contributes to an individual's knowledge of the world around them.

As well as ToM, The Event Indexing Model (EIM) (Zwaan et al., 1995) also explains the knowledge acquisition aspect of event memory both from real autobiographical and fictional events. EIM further reinforces how the multiple dimensions of an event are tracked by an individual when they engage both autobiographically or vicariously through fiction, and how this information is consolidated along with previous memories that are already stored. This model identifies how pre-existing

mental representations allow individuals to integrate new information they have acquired through an event and align the two together (Rinck & Weber, 2003).
Furthermore, Mar et al. (2010) summarises how interactions with fictional literature stimulate 'emotionally valenced memories' cued by events and characters within the story. Information retrieved from fiction needs to be further explored to fully understand the effects fictional situational knowledge can have not only on informing future decisions, but also the impact on emotions. It is evident that memory for fiction is an important aspect of human life and affects individuals throughout the lifespan. By conducting the review, future researchers will be able to use it as a baseline for knowledge in the field and as guidance for future research.

METHODS

Strategy of data synthesis To ensure the scoping review is conducted in a methodical and structured manner, the Joanna Briggs Institute (JBI) decision tree was used to identify which approach would be suitable for the scoping review. It was identified that PRISMA-ScR (Preferred Reporting Items for Systematic reviews and Meta-Analyses – Scoping Reviews) will be the best guide to follow. The PRISMA-ScR guideline consists of 20 items for completing a scoping review, forming a comprehensive checklist. By using this checklist, it will be possible to ensure that the scoping review is structured, as well as being thorough. The following databases will be used in the search; Psychology and Behavioural Sciences Collection, PsycINFO, Science Direct, Humanities Source, Web of Science, Cochrane Library, and EthOS, and below are the search terms that will be used across all databases:
• Memory for fiction
• Fiction as a cue for autobiographical memory
• Fictional and autobiographical memory
• Real event memory and memory for fiction
• Real event memory and novel memories
• Autobiographical and fictional remembering
• Fictional memory distortion
• Memory for novels
• Distorted memories of fiction
• Misremembering novels
• Memories of works of fiction
• Recollection of memory for fiction
• Retention of short stories
• Retention of novels
• Memory for fiction and memory recall.

Eligibility criteria • Studies including participants of any age, gender, ethnicity, geographical location will be included, however, studies involving non-human participants, such as rats, will be excluded.
• There is no limit regarding a period of time the study was conducted in, this is to ensure the best opportunity to explore what is already known in research.
• The search will remain broad, therefore, there is no discrimination regarding the publication status, meaning, to avoid publication bias, Grey Literature, such as conference abstracts, presentations, unpublished trial data, reports, dissertation/theses, will also be included.
• All studies must be written in English or already be translated to English.
• Only studies allowing the researcher access to the full text will be included.
• Work that is non-empirical will not be considered for inclusion. This is so all research included is supported by empirical evidence.

Source of evidence screening and selection Data being collected will be imported to RAYYAN, a web-based tool used by researchers to screen and organise data collected for a review project, including scoping reviews. By using this tool, it will be possible to collate research from several databases, providing a computerised documentation of the process taken to achieve a bibliographic record of research on the topic. As well as being a place to store the data, RAYYAN is also able to detect duplicates that the user can then examine and confirm if the documents are in the fact the same. Finally, RAYYAN offers an AI-assisted relevance ranking and text mining system to conduct the screening process, highlighting any relevance the researcher has added to the inclusion and exclusion criteria. The researcher is then able to probe the documents, analysing key features and decide on which documents should be excluded from the research, giving a reason as to why.
The screening process for the review will be undertaken in two stages. The first stage will be for the researcher to eliminate any papers that have been highlighted by RAYYAN as criteria for exclusion by reviewing the titles and abstracts against the inclusion and exclusion criterion. Next, stage two will follow a similar process to stage one but will consist of a full-text review, further analysing all data against the inclusion and exclusion criterion until the researcher is left with a narrow field of relevant results.

Data management To manage the references during the review process, Scribbr will be used, providing an organised account of references from the final screening stage, however, all references from the review will be stored on RAYYAN.

Reporting results / Analysis of the evidence A team, with supervisors, will be assessing studies included in this scoping review. This will ensure there is no risk of bias analysis and enhance a quality assessment of the studies involved. Once all irrelevant studies have been identified, the remaining studies will be assessed using a critical appraisal approach known as the AXIS tool. Developed by the Delphi panel, this tool helps researchers to provide an assessment of the quality of a study as well as the risk of bias. The AXIS tool will allow a thorough investigation of each study to take place, highlighting whether the following were included in the study; aims and objectives, methods such as sample size, population, non-responders, measurements as well as their relevance to the studies aims, and whether the study is able to be repeated. It will further assess whether the results provide basic data with a description of the results, any concerns regarding response rate and bias, internal consistence of results, whether the discussion is justified by the results, and if there were any limitations.

Presentation of the results The results will be presented in a scoping review paper accompanied by a PRISMA flow diagram highlighting the process of analysis.

Language restriction All studies eligible for inclusion will be written in the English language or already translated to the English language.

Country(ies) involved United Kingdom.

Keywords Memory for fiction; autobiographical memory; novel memory; event recall.

Dissemination plans The results from this review will be submitted for publication as a scoping review online.

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