



ELSEVIER

Contents lists available at ScienceDirect

Consciousness and Cognition

journal homepage: www.elsevier.com/locate/concog

Role of triggers and dysphoria in mind-wandering about past, present and future: A laboratory study



Benjamin Plimpton, Priya Patel, Lia Kvavilashvili*

University of Hertfordshire, UK

ARTICLE INFO

Article history:

Received 30 June 2014

Available online 9 February 2015

Keywords:

Dysphoria

Mind-wandering

Involuntary Autobiographical Memory

Future thinking

Prospection

Planning

ABSTRACT

To bridge the related but separate areas of research on mind-wandering and Involuntary Autobiographical Memory (IAM), the frequency and temporal focus of task unrelated thoughts about past, present, and future was compared in 19 dysphoric and 21 non-dysphoric participants, using a modified laboratory method for studying IAMs. Participants were stopped 11 times during a 15-min vigilance task and recorded their thoughts at that moment. In both groups, most thoughts were spontaneous, task-unrelated, and triggered by irrelevant cue-words on the screen with negative words being more likely to trigger past memories and positive cues – thoughts about future. Both groups reported more past memories than current or future thoughts, but differences emerged in the type of future thought experienced: non-dysphoric participants reported more planning thoughts, and dysphoric participants more abstract hypothetical thoughts. The results suggest that some findings from IAM research regarding cues and the impact of dysphoria may be generalizable to mind-wandering.

© 2015 Elsevier Inc. All rights reserved.

1. Introduction

Mind-wandering has been referred to as task unrelated thought (Giambra, 1989), task unrelated images and thoughts (Giambra, 1993, 1995) or stimulus-independent thought (Teasdale et al., 1995) among other names (see Smallwood & Schooler, 2006). Everyday examples range from fantasising about a luxury yacht voyage whilst stirring soup to ‘zoning-out’ when reading a boring text (Schooler, Reichle, & Halpern, 2004; Singer, 1976).

One of the key characteristics of the phenomenon involves ‘decoupling’ from one’s immediate environment, or “a shift in the focus of attention away from the here and now towards one’s private thoughts and feelings” (Smallwood, O’Connor, Sudbery, & Obonsawin, 2007, p. 818). In addition, the incidents of mind-wandering are often unintended, i.e., they occur spontaneously. Sometimes people may not even be aware that their mind has wandered until they are stopped and asked what their thoughts were at that moment (Schooler, 2002; Smallwood, O’Connor, Sudbery, & Obonsawin, 2007). Finally, task unrelated thoughts are often considered to be stimulus independent, as they are thought to originate from internal rather than external sources (Stawarczyk, Majerus, Maj, Van der Linden, & D’Argembeau, 2011). Indeed, according to Singer (1993), “the human condition involves a continuing tension between processing information generated from the physical and social milieu and the continuous operation of centrally generated material from long-term memory in the form of reminiscences, wishes, current concerns, expectations and fantasies” (p. 100).

* Corresponding author at: Department of Psychology and Sports Sciences, University of Hertfordshire, College Lane, Hatfield, Herts AL10 9AB, UK. Fax: +44 (0)1707 285073.

E-mail address: l.kvavilashvili@herts.ac.uk (L. Kvavilashvili).

There is near universal agreement that mind-wandering is both common and frequent in everyday life with some studies suggesting that up to half of our waking lives are spent thinking about matters other than what is immediately before us (Killingsworth & Gilbert, 2010). There is, however, an ongoing debate about its nature and role in mental life (Mooneyham & Schooler, 2013; Smallwood, 2013) with some researchers arguing that mind-wandering represents a failure of executive control which may be detrimental to ongoing activities (McVay & Kane, 2010), while others suggest that it represents the redirection of executive resources toward internal goals when they are not required for completion of an external task, and may therefore have an adaptive function (Klinger, 1999, 2013; Smallwood & Schooler, 2006). This view is also supported by evidence showing that during mind-wandering people are more likely to think about future plans and tasks than about current and past events (Baird, Smallwood, & Schooler, 2011).

Despite this tendency to prospect more often than retrospect, people do report thinking about the past during mind-wandering episodes (e.g., while sitting in a boring meeting, one may suddenly remember a skiing holiday in Switzerland). However, spontaneous remembering of past events without actively trying to remember anything has been termed Involuntary Autobiographical Memory (IAM) and studied as part of research on autobiographical memory with little overlap with research on mind-wandering (for exceptions see Finnbogadóttir & Berntsen, 2013; McVay & Kane, 2013; Song & Wang, 2012; Vannucci, Batool, Pelagatti, & Mazzoni, 2014). The aim of this paper is to take initial steps toward bringing together these two separate streams of research on mind-wandering and IAMs in the hope that this may provide interesting insights for both areas of research.

If IAMs are instances of mind-wandering (cf. Johannessen & Berntsen, 2010), then one would expect that similar findings would be obtained in both areas of research in relation to several important variables. This is clearly the case with respect to the effects of attentional demands of ongoing tasks on the occurrence of mind-wandering and IAMs as both are less likely to occur with cognitively demanding rather than undemanding ongoing tasks (e.g., Antrobus, 1968; Berntsen, 1996; Giambra, 1995; Kvavilashvili & Mandler, 2004; Schlagman & Kvavilashvili, 2008; Smallwood, Davies, et al., 2004; Smallwood, Obonsawin, & Reid, 2003). However, discrepant findings have started to emerge with respect to several other variables. For example, research on IAMs, using both diary and laboratory methods has shown that the majority of IAMs (about 80–94%) are elicited by easily identifiable cues that are predominantly external rather than internal, and related to the central aspects of the content of IAMs (e.g., seeing balloons may elicit a memory about a particular birthday party) (Berntsen, 1996; Mace, 2004; Mace, Bernas, & Clevinger, in press; Mazzoni, Vannucci, & Batool, 2014; Schlagman, Kvavilashvili, & Schulz, 2007). Some studies have also shown the importance of verbal cues (both external and internal) in eliciting IAMs (Mace, 2004; Schlagman & Kvavilashvili, 2008; Schlagman et al., 2007).¹

In contrast, very little is known about the cues that directly trigger mind-wandering episodes (but see McVay & Kane, 2013; Song & Wang, 2012), as participants are not asked to indicate if the thought they were having just before the probe was triggered by a particular cue (internal or external). Moreover, in the experience sampling study of Song and Wang (2012), which did query participants about the cues, it was found that although participants reported cues in 88% of thought probes, the percentage of internal cues (49%) was as high as external cues (51%), which is different from the predominance of external cues reported in the IAM literature (e.g., Berntsen, 1998; Berntsen & Hall, 2004; Schlagman & Kvavilashvili, 2008; Schlagman et al., 2007).

The lack of research on triggers is surprising given that Klinger's (1999, 2013) influential current concerns theory has consistently emphasised the importance of cues in eliciting mind-wandering. According to this theory, people's goals and current concerns sensitize them towards relevant external or internal cues which, upon encountering, automatically re-activate the goal related material in one's consciousness (Klinger, 1978; Klinger, Barta, & Maxeiner, 1980). A recent laboratory study by McVay and Kane (2013) tested this assumption by using an on-going vigilance task with verbal cues some of which were based on the pre-screened 'current concerns' of participants. Collecting periodic thought probes shortly after the appearance of personally relevant cues, McVay and Kane (2013) found a 3–4% increase in mind-wandering relative to controls who were exposed to cue words with no personal relevance. Whilst a small difference, this offers preliminary evidence of the importance of environmental cues in mind-wandering, and their potential link to unfinished goals and underlines the need for further investigation in this particular area.

Discrepant findings have started to emerge also in relation to the temporal focus of task unrelated thoughts. Within mind-wandering research, there is increasing evidence in support of the idea that when participants report experiencing task unrelated thoughts during the ongoing laboratory tasks, they tend to indicate that their thoughts are more often about the future rather than past events (Baird et al., 2011; Smallwood et al., 2011; Stawarczyk, Majerus, Maj, Van der Linden, & D'Argembeau, 2011). However, evidence from naturalistic studies is mixed, with two recent experience-sampling studies reporting the prospective bias (Poerio, Totterdell, & Miles, 2013; Song & Wang, 2012) but an earlier study by Klinger and Cox (1987) failing to find any differences between the frequency of thoughts about the past and future. Moreover, in a diary study by Finnbogadóttir and Berntsen (2013) where participants recorded their involuntary thoughts about the past (i.e., memories) and the future during two separate 1-day periods, the number of recorded IAMs ($M = 22.61$) did not differ from the number of recorded future thoughts ($M = 21.50$) (see also Berntsen & Jacobsen, 2008).

¹ However, being cue-dependent does not mean that IAMs are not task unrelated or spontaneous (cf. Berntsen, 1996). Indeed, remembering the birthday party may be completely unrelated to a task at hand (driving to supermarket) and is involuntary as long as there was no intention to remember anything at the time.

متن کامل مقاله

دریافت فوری ←

ISIArticles

مرجع مقالات تخصصی ایران

- ✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
- ✓ امکان دانلود نسخه ترجمه شده مقالات
- ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
- ✓ امکان دانلود رایگان ۲ صفحه اول هر مقاله
- ✓ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
- ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات