

POSTER PROPOSAL

Ph.d. Student Kim Berg Johannessen – kimbej@psy.au.dk
Professor Dorthe Berntsen – dorthe@psy.au.dk

Motivation for weight loss affects recall from autobiographical memory in dieters

ABSTRACT

The purpose of the present study was to examine the connection between motivation and autobiographical memories. Autobiographical memories recalled in response to dieting related versus neutral cue words were compared between a dieting and non-dieting group. Memories recalled in response to dieting related cue words by the dieting group were more self defining, scored higher on the Centrality of Event Scale and contained more body and weight related elements. No differences between the two groups were found on memories recalled in response to the neutral cue words. The dieting group scored higher on Beck's depression scale and had more recall errors in terms of overgeneral memories than the non-dieting group. The results can be seen to support the concept of current concerns (Klinger, 1978) and the theory of the working self (Conway & Pleydell-Pearce, 2000).

Keywords: Motivation, autobiographical memory and dieting.

DEPARTMENT OF PSYCHOLOGY – UNIVERSITY OF AARHUS

Nobelparken – Jens Chr. Skous Vej 4 – DK – 8000 Århus C - Denmark

Introduction

In the western world the number of people who suffer from overweight and obesity are increasing rapidly. WHO calls it an epidemic (Due, Heitmann & Sørensen, 2006). Concurrent with these facts people who suffer from obesity have a relapse of 50-60% after 1-2 years after a diet and around 90% have gained everything or more after 4-5 years (Svendsen et al., 2001). Few studies of obesity have examined the interaction between motivation for weight loss and cognitive factors.

The theoretical background for the present study is a synthesis of literature related to the interaction between motivation, autobiographical memories and depression. Few theorists have tried to integrate motivation and cognition (e.g., Bartlett, 1932; Klinger, 1978; Conway & Pleydell-Pearce, 2000). Klinger's concept "current concerns" is here used as the link between motivation and autobiographical memories. Current concerns are defined as "the state of an organism between the time it becomes committed to pursuing a goal and the time it either gains the goal or abandons the pursuit" (Klinger, 1978, p 249). When a person engages him- or herself to a specific goal latent cognitive processes are initiated (i.e., current concerns) which result in an increased sensitivity to cues related to the desired goal (Klinger & Cox, 2003). The increased sensitivity towards cue related material influence the working self and thereby retrieval from autobiographical memory (Conway & Pleydell-Pearce, 2000). Empirical studies supporting the idea of current concerns show an overrepresentation of themes corresponding with the participants' current concerns in their dreams (Klinger, 1971; Nikles II et al., 1998) and thoughts (Klinger, Barta & Maxeiner, 1980). Since motivation for weight loss has to be very strong because of the counteracting factors, the corresponding current concerns entail that people on a diet may be very sensitive towards cues that are associated with the goal of losing weight.

Method

Participants

The study involved 16 members of The Weight Consultants and 74 psychology students. Twenty-nine of the participants recorded being on a diet. The dieting group consists of the 16 members of The Weight Consultants and of 13 students who had recorded being on a diet. Men and participants who did not record whether they were on a diet were excluded. The remaining 77 women were split according to whether they recorded being on a diet or not. The dieting group had a significant higher Body Mass Index (BMI) than the control group

The Questionnaire and scoring of data

The participants were instructed to retrieve five personal and specific memories in response to five cue words. Two classes of cue words were used: three dieting words which were weight and body related (mirror, food and clothes) and two neutral control words (plant and car). After recording the five memories the participants answered questions about each memory and filled out the short 7-items version of the Central of Event Scale – measuring the extent to which the remembered event was deemed central to the person’s life story and identity (Berntsen & Rubin, 2006). In addition, the participants filled out Beck’s depression scale (BDI-II) and recorded personal data concerning gender, age, weight and height. Finally, the participants recorded whether they were on a diet at the moment.

The memories were scored according to whether they contained body or weight related elements and level of specificity. The specificity was scored according to William’s (1995) three categories: specific, general and extended event.

Results

The results showed a general difference between the dieting group and the control group. The dieting group scored significantly higher on age of the memories, internal rehearsal, importance, intensity, consequence, and on the CES-scale for memories recalled in response to the three dieting words while no differences were found for memories recalled in response to the two control words. Significantly more body and weight related elements were recorded for memories recalled in response to the dieting words and the dieting group recorded significantly more memories with body and weight related elements than the control group. Memories from the dieting group that contained body and weight related elements scored higher on vividness, importance, intensity, consequence and the CES than the memories without these elements.

The dieting group scored significantly higher on the BDI than the control group. A multiple regression analysis showed that dieting versus non-dieting was a significant predictor for BDI, while BMI did not have any influence on the BDI. The participants who recorded more than one general event scored significantly higher on the BDI than the rest. At the same time a significant correlation between the number of registered general events and BDI was found.

Conclusion

The study found general support for the assumption, that strong motivation for weight loss affects recall for autobiographical memories. The findings agree with Klingers (1978) concept of current concerns suggesting an increased sensitivity to cues that are associated with the desired goal. The results also agree with the notion of the “working self” as constraining recall from autobiographical memory to be consistent with current goals (Conway & Pleydell-Pearce, 2000).

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