LETTER TO THE EDITOR

Autobiographical Memory in Detoxified Dependent Drinkers

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In experimental studies, many clinical populations, e.g. depression and trauma, show a relative difficulty to produce specific autobiographical memories when compared to non-clinical participants (e.g. Williams et al., 2007). ‘Specific’ memories are defined as a single event lasting <1 day. Clinically, this reduced autobiographical memory specificity is associated with poorer psychological functioning, problem solving limitations, greater hopelessness (Henderson et al., 2002) and poorer outcome. Such aspects have potential relevance in relation to alcohol problems, specifically cognitively based theories of and interventions for alcohol problems. We are not aware of published research examining autobiographical memory function within this population.

In our study, 26, in treatment, detoxified dependent drinkers were recruited along with 29 non-dependent drinkers recruited from community sources. The median time since last consuming an alcoholic drink for the dependent drinkers was 16 days, range 1–365 days. The mean Severity of Alcohol Dependence Questionnaire (Stockwell et al., 1979) score for the dependent drinkers was 35 ± 10.9. An Autobiographical Memory Test (AMT) procedure was used as described by Phillips and Williams (1997). Among other measures included were a measure of everyday memory performance, an estimate of pre-morbid intelligence and a measure of current symptoms of depression (Beck Depression Inventory, Beck et al., 1979).

Dependent drinkers produced significantly fewer specific memories than non-dependent drinkers. The mean number of first memory recalled that was specific was 9.15 ± 3.67 for dependent drinkers and 13.72 ± 2.31 for non-dependent drinkers \( (f_{1,53} = 31.15, P = 0.001) \), across 18 trials per participant. Dependent drinkers were also significantly slower to produce specific memories. The average time in seconds taken by the dependent drinkers to recall a specific memory was 18.89 ± 5.27; for the non-dependent drinkers this was 13.69 ± 3.86 \( (t_{45.43} = -4.14, P < 0.001) \). The only notable significant difference between the two groups on non-alcohol variables was higher depression scores for the dependent drinkers [mean BDI scores 19.54 ± 10.83 and 3.55 ± 4.0 for dependent and non-dependent drinkers, respectively \( (t_{53} = -7.42, P < 0.001) \)]. Group differences in specificity of autobiographical memory remained after statistically controlling for this variable. Frequency of specific memory was \( F_{1,52} = 9.56, P = 0.003 \). Latency to specific memory was \( F_{1,52} = 5.76, P = 0.02 \).

The results of this study suggest detoxified dependent drinkers show reduced memory specificity similar to those noted in other clinical populations. Williams and Scott (1988) found that depressed participants produced specific first memories on 40% of occasions compared to 70% for non-depressed controls. In this study, dependent drinkers were specific for first recalled memory for 50.8% of cues and non-dependent drinkers were specific for 76.2%. There are limitations to this study in addition to its small size. Participants’ memories were rated by a researcher who was not blind to the drinking status of the participant and concordance with a blind rater was not 100%. Co-existing mental health problems are typical rather than exceptional for dependent drinkers (Baker and Velleman, 2007); these may remain potential confounding variables to the observed differences. We suggest reduced autobiographical memory specificity may be implicated in the development, maintenance and relapse of alcohol problems. Williams et al. (1997) describe over-general autobiographical memory as leading to a state of ‘psychological entrapment’ where lack of memory specificity impairs problem solving and increases hopelessness. In such circumstances, low mood and poor problem solving strategies may persist, maintaining alcohol use. With lapse and relapse common in recovery from alcohol problems, over-general autobiographical memory may overshadow a person’s recall of specific achievements with implications for self-efficacy. As a cognitive style, over general autobiographical memory is relevant in any cognitively based intervention. Intervention strategies such as challenging dysfunctional beliefs may be impaired by limitations in retrieving specific alternative events. Where unhelpful cognitive styles remain relapse to drinking may more likely (Wanigaratne et al., 1990). Given the importance placed on CBFT-based interventions such as Relapse Prevention in the effective treatment of alcohol problems (Raistrick et al., 2006), an understanding of the various cognitive styles in this population is clinically important. Further investigation of specificity of autobiographical memory in problem drinkers should determine how different treatment outcomes may be associated with differential changes in specificity of autobiographical memory.

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