

## Title: Critical reasoning and advertising in children and adolescents: a systematic scoping review

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### Introduction:

There is considerable interest in tightening food and drink advertising restrictions to address childhood obesity. However, regulations often focus on protecting children aged 12 years and younger, with the assumption that older children are cognitively capable of understanding advertising. However, studies of adolescent brain development have indicated that reasoning ability may develop later and teenagers are vulnerable to making risky decisions. This review aims to systematically scope studies relating to 'critical reasoning' of advertising to young people to establish the nature of the literature and inform future evidence synthesis.

### Methods:

Since the extent of the literature was largely unknown, inclusion criteria were broad (>5 years to <18 years; any advert as the exposure; a measure of 'judgement' as an outcome; experimental, intervention, cross-sectional, longitudinal, and qualitative methodologies; with no restrictions on language or date). The following databases were searched: Ovid Medline, Cochrane, Scopus, Psych Info, ProQuest (ASSIA), Web of Science (Social Science and emerging sources), Social Policy and Practice, and Child Development and Adolescent Studies. Articles were double screened on title and abstract and EPPI-Reviewer 4 systematic review software used to manage the review and apply machine learning to the screening.

### Results:

A total of 7467 articles were identified of which 618 were considered potentially relevant on title and abstract. The largest groupings of articles reported understanding of advertising (n=178) and attitudes/ beliefs towards the advertised product or behaviour (n=179), these comprised cross-sectional and longitudinal studies with many focusing on alcohol and tobacco advertising. Other studies reported the impact of health promotion advertisements (n=85) and media training (n=29), and impact on attitudes to branding (n=38). Fewer studies examined body image, models of cognition, or used qualitative methodologies.

### Conclusion:

The literature is highly heterogenous and surprisingly rich, although much of it focuses on advertising for alcohol and tobacco rather than food and drink. This scoping review will inform future work and indicates scope to synthesise studies relating to the impact of advertising on understanding and attitudes of messages/ products.

### Keywords

advertising, critical reasoning, judgement, child, adolescent

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