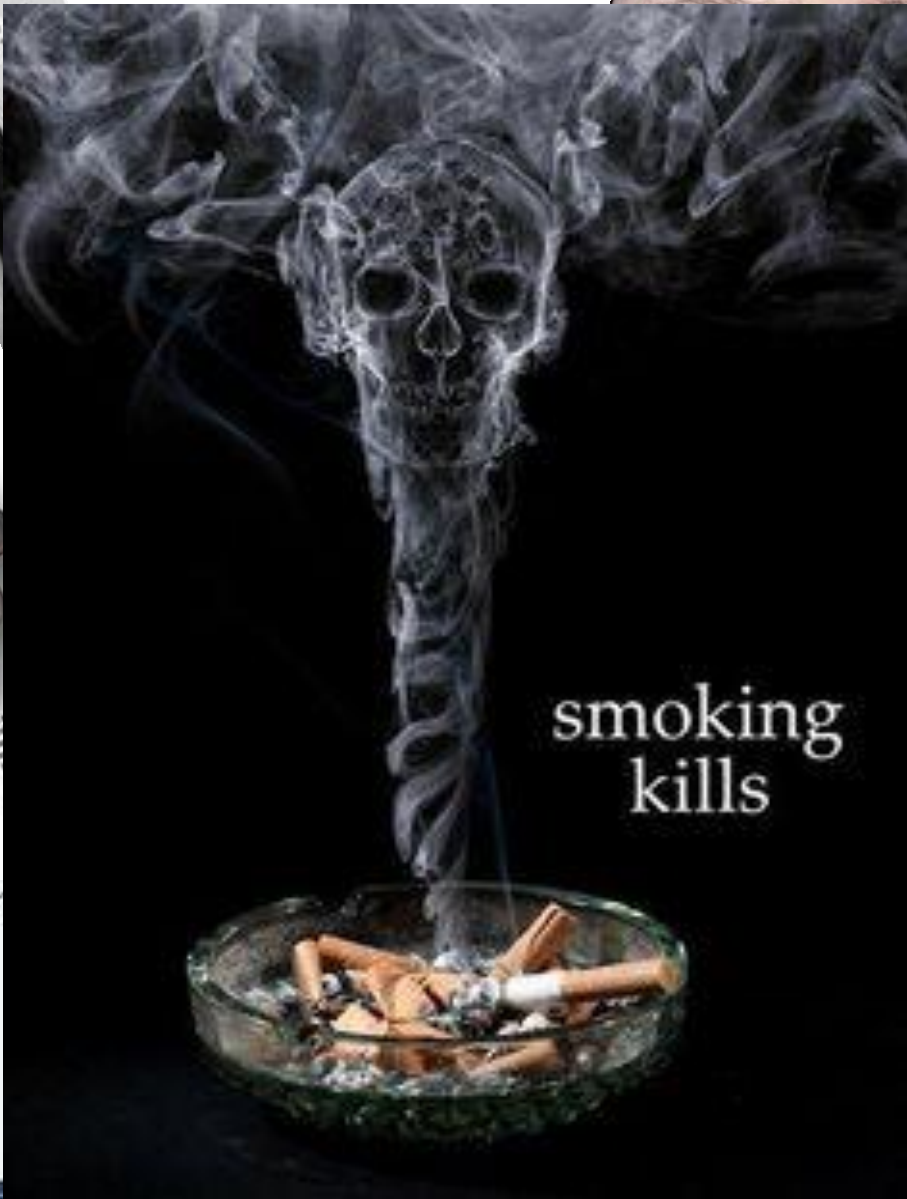


***A systematic review to critically assess the positive and negative consequences of fear appeal in anti-smoking campaigns***

*Cihan Kayikci*

Quitting is hard.  
Not quitting, is harder.

smoking has a grip on  
your heart.



smoking  
kills

Smoking  
can cause  
a slow  
and painful

Your LIFE will fade away...  
If You Continue YOUR Smoke



garettes  
are  
addictive.



The average smoker needs over five thousand cigarettes a year.  
Get unhooked. Call 0800 169 0 169 or visit [getunhooked.co.uk](http://getunhooked.co.uk)

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ANTI-SMOKING  
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## OUTLINE

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- ✘ FEAR APPEAL THEORY: 1953 to the PRESENT
- ✘ OBJECTIVES
- ✘ PURPOSE OF THE STUDY & RESEARCH QUESTION
- ✘ METHODOLOGY
- ✘ NARRATIVE SUMMARY OF STUDIES
  - Positive Consequences of Fear Appeal in Anti-Smoking Health Campaigns
  - Negative Consequences of Fear Appeal in Anti-Smoking Health Campaigns
- ✘ DISCUSSION

## FEAR APPEAL THEORY: 1953 TO THE PRESENT

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- ✘ Most popular research topic between 1953-1975
- ✘ Outcomes of the fear appeal studies classified the results in **two categories**:
  - \* Outcomes related to acceptance of the message`s recommendations (intentions, behaviours)
  - Outcomes related to rejection of the message (avoidance, denial)
- ✘ Fear appeal theories into **three major groups**:
  - \* Drive theories
    - \* Parallel response models
    - \* Subjective expected utility (SEU) model
    - \* Witte (1994) developed extended parallel process model (EPPM)

## OBJECTIVES

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- ✘ To explore and summarise the consequences (negative and positive) of fear appeal in recent anti-smoking campaigns studies.
- ✘ To identify the strengths and limitations of the recent studies in literature in order to assess their quality
- ✘ To discuss the recent literary findings about the positive and negative consequences of fear appeal strategy in anti-smoking campaigns
- ✘ To make evidence-based judgements about the consequences of fear appeal in anti-smoking campaigns.
- ✘ To make recommendations to improve antismoking health campaigns

## PURPOSE OF THE STUDY & RESEARCH QUESTION

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The aim of this literature review seeks to:

*Critically assess the positive and negative consequences of fear appeal in anti smoking campaigns.*

Research Question

*Are the consequences of fear appeal in antismoking campaigns predominantly positive or negative?*

# METHODOLOGY

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## Mapping review question

Several complimentary methods were used to gather the topical information in the review.

- ✘ Report, news, UK and EU laws towards anti-smoking campaigns policy
- ✘ A deep search of social and psychological databases was undertaken to find published studies about health warnings in anti-smoking campaigns and its consequences.
- ✘ Grey literature databases
- ✘ A manual search of health promotion books and journals covering fear appeal strategy in anti-smoking campaigns was conducted at the University of West of England library.
- ✘ The PICO(T) framework was utilized to break down the research question into key components: Population, Intervention, Comparison Outcome (and Timeframe for documenting the inclusion exclusion criteria.

## METHODOLOGY

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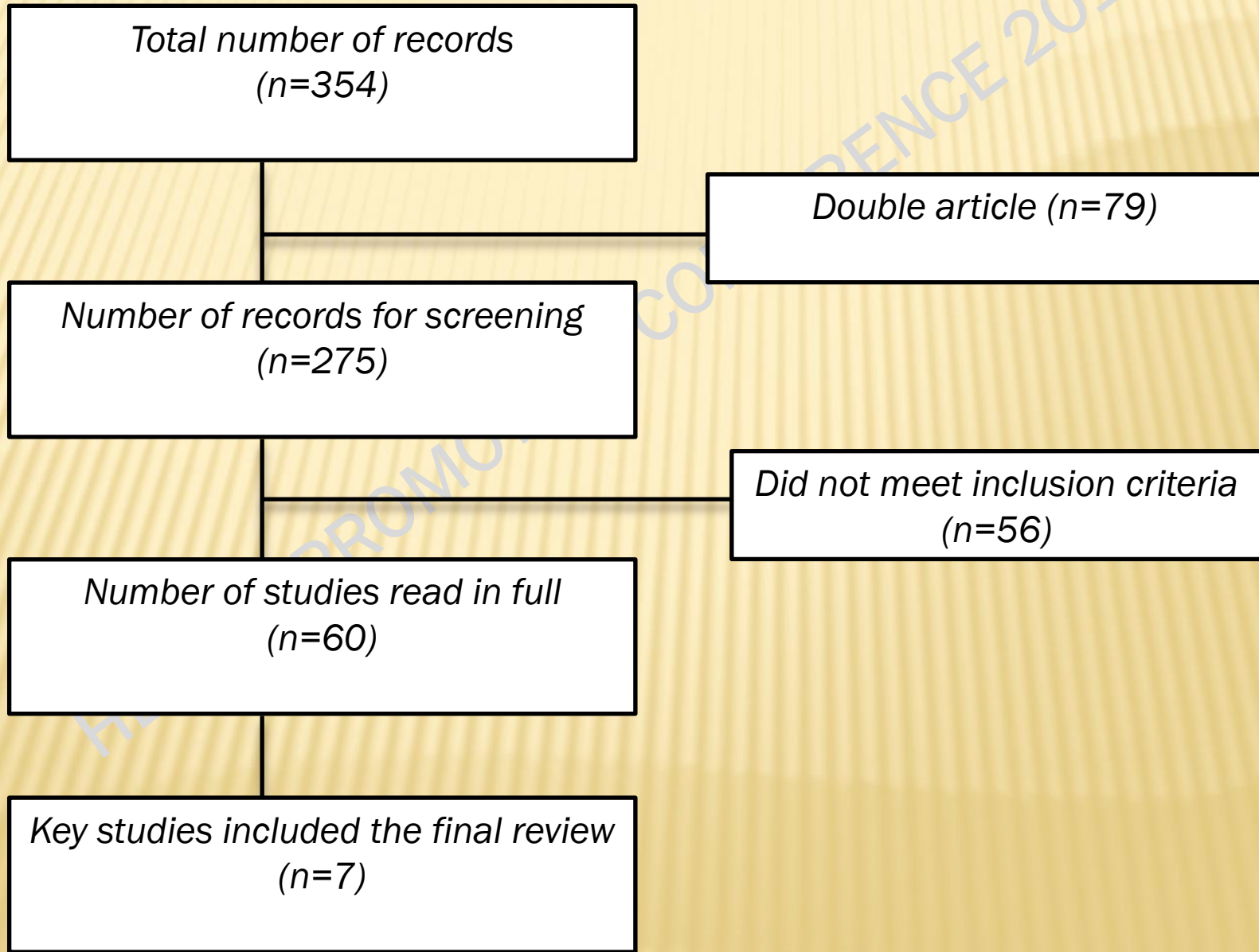
Definitive guidance (Pope et al., 2007) has been used as a framework.

The stages followed in this review were:

- ✘ Development/ formulation of a review question
- ✘ Development of review protocol
- ✘ Comprehensive literature search for all relevant studies
- ✘ Application of inclusion and exclusion criteria to all identified studies
- ✘ Quality assessment of included studies
- ✘ Data extraction
- ✘ Synthesis of findings
- ✘ Reporting of findings and implications
- ✘ Data dissemination



## METHODOLOGY: RESEARCH RESULT



## NARRATIVE SUMMARY OF STUDIES

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**Positive Consequences:** Increasing the awareness of health risks, motivation to quit, increasing health knowledge towards smoking

**Negative Consequences:** Defensive reactions, Avoidance, suppression, lack of attention towards health warnings

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## POSITIVE CONSEQUENCES OF FEAR APPEAL IN ANTI-SMOKING HEALTH CAMPAIGNS

- ✘ Health warnings that evoke fear in anti-smoking campaigns increase people's knowledge towards the health risks of smoking (Hammond et al., 2010; White, Webster & Wakefield, 2008).
- ✘ Health warnings on smoking packs increased a person's motivation to quit (Schneider, Gadinger & Fisher, 2011; Wong and Capella, 2009).
- ✘ Graphic health warnings influence students in the process of taking up smoking and increased the frequency of thinking about quitting smoking (White, Webster and Wakefield, 2008)
- ✘ Pictorial warnings that evoke fear on cigarette packaging lead to a significantly higher motivation to quit than solely written warnings (Schneider, Gadinger and Fisher, 2011)
- ✘ Hammond et al. (2010) examine the impacts of package warnings on consumer knowledge of tobacco risk. Results of the study suggest that cigarette packages that include health warnings are the major health information source for all countries, particularly in Canada.

## NEGATIVE CONSEQUENCES OF FEAR APPEAL IN ANTI-SMOKING HEALTH CAMPAIGNS

- ✘ Using fear appeal in anti-smoking campaigns may cause the development of defensive behaviours by smokers (Akyuz, 2015; Kessels et al., 2014; Maynard et al., 2014).
- ✘ People who are the most relevant to a health threat are the ones who develop self-defensive avoidance in response to high threat health messages (i.e., smokers watching high threat smoking pictures) (Akyuz, 2015; Kessels et al., 2014; Maynard et al., 2014).
- ✘ Kessels et al., (2014) examined defensive reactions to threatening health messages by studying early cognitive processes during message exposure. the findings of these studies provided further neuro-scientific support for the hypothesis that threatening health information causes more avoidance responses among those for whom the health threat is 'self-relevant'.
- ✘ The clear evidence of visual avoidance of health warnings among regular smokers was found by measuring health warning avoidance at a more implicit level with using eye-tracking technology (Maynard et al, 2014).

## DISCUSSION

Anti-Smoking Campaigns that are designed based on Fear Appeal Strategy

Contradictory results about the consequences of fear appeal in anti-smoking campaigns

Positive: Increasing the awareness of health risks, motivation to quit, increasing health knowledge towards smoking

Positive: Increasing the awareness of health risks, motivation to quit, increasing health knowledge towards smoking

Positive consequences of fear appeal in anti-smoking outweigh the negative consequences

## DISCUSSION



White, Webster & Wakefield, 2010  
Schneider, Gadinger & Fischer, 2011  
Wong & Capella, 2009

Akyuz, 2015  
Kessels et al., 2014  
Maynard et al., 2014

Motivation  
Self-efficacy  
Heavy smokers  
Target audience  
Quitting process  
Health knowledge  
Increase the awareness of smoking  
related health risks  
Attention avoidance coping strategy  
Suppress threat-relevant information

## IMPLICATIONS OF FINDINGS OF REVIEW FOR PUBLIC HEALTH PRACTICE

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- ✘ This review concluded that the negative consequences of fear appeal in anti-smoking campaigns mostly occurred in heavy smokers and therefore anti-smoking campaigns might be more effective if they choose a target population and design interventions based on targeted groups.
- ✘ The included studies prove that fear appeal strategy can increase the awareness of the health risks associated with smoking, thus anti-smoking campaigns may continue to use fear appeal strategy in health education in anti-smoking campaigns.
- ✘ It is also essential to summarise the recent findings of other studies in order to continue to improve the development of anti-smoking interventions in public health.

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Thank you for your attention

Questions ?

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