

Eye-tracking and visual attention to loss-related stimuli in bereaved individuals

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The primary objective of the study is to determine whether people scoring higher on grief rumination show a stronger vigilance-avoidance pattern of attention for loss-related stimuli. We expect grief rumination will show a positive linear...

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| Ethical review | Approved WMO |
| Status | Recruitment stopped |
| Health condition type | Adjustment disorders (incl subtypes) |
| Study type | Observational invasive |

Summary

ID

NL-OMON34589

Source

ToetsingOnline

Brief title

Eye-tracking and visual attention to loss-related stimuli during grief

Condition

- Adjustment disorders (incl subtypes)

Synonym

Bereavement, Grief

Research involving

Human

Sponsors and support

Primary sponsor: Universiteit Utrecht

Source(s) of monetary or material Support: Zon-MW

Intervention

Keyword: Attention, Bereavement, Grief, Rumination

Outcome measures

Primary outcome

The main study parameters are:

- a) The average amount of time spent looking at specific loss-related picture-word combinations (deceased + loss-related) in the first 500 ms of exposure;
- b) The average amount of time spent looking at specific loss-related picture-word combinations (deceased + loss-related) in the 9500 ms after the first 500 ms;
- c) The average amount of time spent looking at loss-related words in the first 500 ms of exposure;
- d) The average amount of time spent looking at loss-related words in the 9500 ms after the first 500 ms.

Secondary outcome

The secondary study parameters are:

- a) The proportion first fixation points of the participant on specific picture-word combinations (deceased + loss-related; deceased + neutral; deceased + negative; stranger + loss-related; stranger + negative; stranger + neutral);
- b) The average number of words recalled correctly (loss-related, negative, neutral);
- c) The average number of words recognized correctly (loss-related, negative,

neutral).

d) The average emotional judgment scores on Self-Assessment Manikins (valence, intensity and dominance) for each type of picture-word combination (deceased + loss-related; deceased + neutral; deceased + negative; stranger + loss-related; stranger + negative; stranger + neutral).

e) The average pupil dilation change in millimetres for each type of picture-word combination (deceased + loss-related; deceased + neutral; deceased + negative; stranger + loss-related; stranger + negative; stranger + neutral).

Study description

Background summary

The loss of a loved one is among the most stressful life-events that a person can experience. Although most people adjust to bereavement without professional intervention, some people develop complications in their grieving process and/or physical and mental health problems. Research has shown that ruminative thought may be one of the central factors that influence bereavement outcomes negatively. Rumination in grief consists of repetitive thoughts about the events leading up to the loss, reasons why the loss occurred and the emotional and physical consequences of the loss. Higher rumination in bereaved individuals has been related to lower experienced well-being, and higher depression and anxiety. Although the negative effects of rumination during grief have generally been well documented, it is unclear what the function of rumination is. Most researchers today think it is a confrontation strategy. They believe bereaved individuals confront themselves repeatedly with the reality of the loss, and through repeated exposure gradually come to terms with the loss. However, this interpretation has called into question. Some researchers now hold rumination may be similar to avoidance. According to this interpretation, bereaved individuals think repeatedly about reasons for the loss and why the loss occurred in order not to think about the reality of the loss. As such, rumination disrupts and prolongs the grieving process. The current study aims to clarify whether grief rumination is confrontation or avoidance of the reality of the loss through the study of attention.

The study of attention is a broadly accepted and rigorous method for the study of avoidance and confrontation. Eye tracking is the current state-of-the-art

method to assess attention patterns (for an example in a different field: Rinck & Becker, 2006). In this study, the time-pattern of attention of bereaved individuals for specific loss-related stimuli will be assessed for the first time using two eye tracking tasks. We expect self-reported rumination to predict a fearful avoidant pattern of attention (see also: Mogg et al., 2004) in bereaved individuals, that is, the higher bereaved individuals score on rumination, the stronger they will show initial vigilance and subsequent avoidance for fear-relevant stimuli (i.e. loss-related stimuli).

Study objective

The primary objective of the study is to determine whether people scoring higher on grief rumination show a stronger vigilance-avoidance pattern of attention for loss-related stimuli. We expect grief rumination will show a positive linear relationship with the dwell time on loss-related stimuli on a subconscious level (< 500 ms), which indicates initial vigilance. We expect a negative linear relationship with dwell time on specific loss-related stimuli on a conscious level (> 500 ms-10.000ms), which indicates subsequent avoidance.

Study design

The study is a within subjects experimental study, which consists of four phases. In the first phase, participants complete six questionnaires (respectively on background information, depression, complicated grief, posttraumatic stress, (depressive) rumination and rumination in grief). In the second phase, participants complete two eye tracking tasks. In the third phase, participants complete two memory tasks; a recall task and a recognition task. In the last phase, participants will complete an emotional judgment task. Before the first phase each participant will complete an informed consent procedure and after phase four each participant will be debriefed. The complete procedure will take approximately one hour for each participant.

Intervention

Participants are asked to watch pictures of their deceased loved one and pictures of an unknown person (matched on age, environment and sex) for five minutes. These pictures will be combined with loss-related words (e.g. grief, loss), neutral words (e.g. middle, globe) and negative words (e.g. failure, angry). Participants are also asked to watch different types of words (loss-related, neutral, negative) for approximately 5 minutes.

Study burden and risks

Exposure to loss-related stimuli, a central aspect of this study, may be considered intrusive. However, the decision to use these stimuli in this study is not taken lightly. Importantly, procedures used in this study have been

successfully applied numerous times in previous research on bereavement and even trauma, without adverse consequences for participants. To reduce the chance of adverse emotional reactions even further, people who have lost a loved one recently, that is, less than six months ago, are excluded from the study. While the adverse consequences for participants are expected to be low, the scientific and clinical relevance of the research is very high, as insight into avoidance mechanisms in bereaved individuals is crucial for the understanding of development and persistence of complications in the grieving process. Furthermore, the results of this study may give direction to future research and to the development of psychological interventions for bereaved individuals. That is, if rumination is confrontation, therapeutic interventions should focus more on distraction, whereas if rumination is avoidance, therapeutic interventions should focus more on confrontation (for details: Chapter 8.3 of the protocol).

Contacts

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Trial sites

Listed location countries

Netherlands

Eligibility criteria

Age

Adults (18-64 years)

Elderly (65 years and older)

Inclusion criteria

The participant must be 18 years or older.

The participant must have a good command of the Dutch language.

The participant has experienced the loss of a parent, child, partner, brother or sister.

The participant has been confronted with this loss more than 6 months ago but less than four years ago.

Exclusion criteria

The participant reports serious suicidal intentions.

The participant suffers from psychoses and/or schizophrenia.

Study design

Design

Study type: Observational invasive

Masking: Open (masking not used)

Control: Uncontrolled

Primary purpose: Other

Recruitment

NL

Recruitment status: Recruitment stopped

Start date (anticipated): 28-04-2011

Enrollment: 60

Type: Actual

Ethics review

Approved WMO

Date: 06-12-2010

Application type: First submission

Review commission:

METIGG: Medisch Ethische Toetsingscommissie Instellingen
Geestelijke Gezondheidszorg (Utrecht)

Study registrations

Followed up by the following (possibly more current) registration

No registrations found.

Other (possibly less up-to-date) registrations in this register

No registrations found.

In other registers

| Register | ID |
|----------|----------------|
| CCMO | NL33548.097.10 |