Journal of open psychology data

Ruigendijk, H A H and Koole, S L 2016 When Focusing on a Goal Interferes with Action Control: Action Versus State Orientation and Over-maintenance of Intentions [1]. *Journal of Open Psychology Data,* 4: e5, DOI: http://dx.doi.org/10.5334/jopd.22

DATA PAPER

When Focusing on a Goal Interferes with Action Control: Action Versus State Orientation and Over-maintenance of Intentions [1]

Hester A.H. Ruigendijk[1] and Sander L. Koole[2]

[1] VU University Amsterdam, Department of Experimental and Applied Psychology, NL

[2] VU University Amsterdam, Department of Clinical Psychology, NL

Corresponding author: Hester A.H. Ruigendijk (hesterruigendijk@gmail.com)

The dataset includes data from the two studies reported in our Over-maintenance of Intentions paper [1]. The data of study 1 was collected at the psychology lab at VU University Amsterdam in 2008 and 2013 among Dutch-speaking student samples. The data of study 2 was collected at the psychology lab at VU University Amsterdam in 2009 and 2013 among Dutch-speaking student samples. The dataset consists of the measures described in the paper. The data can be used for replication purposes, meta-analyses, and exploratory analyses. The authors also welcome collaborative research based on re-analyses of the data.

Keywords: Action orientation; State orientation; Cognitive control; Intentions; Goals; Proactive control; Reactive control

(1) Overview

Context

Collection Date(s)

2008, 2009, 2013

Background

People vary in action versus state orientation, or the ease versus difficulty by which they can form and enact goals under demanding conditions [2]. According to the over-maintenance hypothesis, state-oriented people are prone to think about their intentions in a narrow linguistic format that prevents flexible action control. Two studies tested this hypothesis by manipulating intention focus among action versus state-oriented participants and examining how well they performed difficult actions. Focusing strongly (rather than weakly) on the task goal led state-oriented participants to make more errors during incongruent trials of a Stroop task (Study 1) and led to greater task-switch costs in response latencies (Study 2). Action-oriented participants showed the reverse pattern, and performed difficult actions more effectively when focusing on the task goal. These findings suggest that focusing on intentions may paradoxically impair action control among state-oriented people.

(2) Methods

Sample

In both Studies 1 and 2, students participated in our research in the Social Psychology Laboratories at the VU University Amsterdam for either payment or course credit. We gathered information on age and sex in both study 1 and 2.

Study 1: Sixty-three volunteers (46 female and 17 male, average age 21) with varying dispositional scores on action versus state orientation were randomly assigned to the strong versus weak intention focus conditions.

Study 2: Sixty-nine volunteers (48 female and 21 male, average age 20) at the VU University Amsterdam with varying dispositional scores on action versus state orientation were randomly assigned to the strong versus weak intention focus conditions.

Materials

In both Studies 1 and 2, individual differences in action versus state orientation were assessed with the decisiveness subscale of the Action Control Scale (ACS90; [3]). Each of the 12 items of the decisiveness scale describe a demanding situation and two ways of dealing with the situation. One alternative always corresponds with an action-oriented way of coping; the other with a state-oriented way of coping. The items with the following numbers were used to determine individual levels of action orientation on the demand related facet of the action control scale: 1, 3, 4, 6, 7, 9, 10, 15, 16, 19, 21, 24 (of which item 1, 7, 9, 15, and 21 were recoded, with 1 = 2, and 2 = 1). English phrasing of the questionnaire can be found in the SPSS files. The Dutch translation of the questionnaire can be found in a separate word file (ActionControlScaleDutchEnglish.docx). Lower scores indicate a more state-oriented way of coping, while higher scores indicate a more action-oriented way of coping.

In both Studies 1 and 2, participants' mood was assessed twice using a self-report inventory developed by Kuhl and associates translated into Dutch (e.g., [4]). Both the original Dutch phrasing and the English translation of the Dutch questions can be found in the SPSS files. During each of the two mood assessments, participants rated how well 23 mood adjectives (e.g., tense, listless, joyful) applied to their current feelings, using 4-point Likert scales (from 1 = not at all, to 4 = completely). The adjectives were averaged into a single index of negative mood.

In both Studies 1 and 2, participants received instructions that manipulated how strongly participants were focused on their intentions during completion of the Stroop task (Study 1) or the categorization task (Study 2). In the weak intention focus condition participants were instructed to approach the task in a way that would minimize their reliance on conscious intentions, while in the strong intention focus condition participants were instructed to approach the task in a way that would maximize their reliance on conscious intentions. These instructions were modelled after procedures of Smilek, Enns, Eastwood, and Merikle [5].

In Study 1, participants completed a Stroop task [6] consisting of 160 trials, out of which 60 were target trials that were used for analysis. The target trials consisted of 20 congruent, 20 incongruent and 20 neutral trials. During congruent trials, the words RED or BLUE were presented in matching colors. During incongruent trials, the words were presented in mismatching colors. During neutral trials, four crosses (XXXX) were presented in either blue or red font. The remaining 100 trials contained words that were congruent with the font colors. The 160 trials were always presented in random order. Each trial had a predetermined number, which does not translate to the order in which the trials were presented, but instead was used to predetermine which trials would be selected as target trials. (E.g. trial number 1 (str1rt) might be presented as the 5th, 22nd or 159th , or any random place in the sequence of presented trials, but was always an incongruent trial that was selected for analysis, see "Study1_RecodeData.SPS".)

In study 2, participants completed a categorization task for which they initially categorize target stimuli in a specific color while ignoring distracter stimuli in a different color (after Dreisbach and Goschke[7]). After this, participants have to categorize stimuli in a new target color, while distracters appear in the former target color. During this second stage, difficulties in disengaging from the old task goal presumably reflect perseveration tendencies. Participants performed the task during three separate runs. Each run consisted of two stages of respectively 40 and 20 trials. Participants were informed about the task switch after the first stage. Before each run participants received the intention focus instructions.

The test materials and instructions are described in more detail in the paper and are available together with the datasets.

Procedures

Both Studies 1 and 2, were conducted at the psychology lab of the VU University Amsterdam, which was located at the basement of the psychology building. Because experiments are run there throughout the year, participants (mostly students) show up and participate on their own initiative, either in return for monetary payment or course credits. The experiments were run in individual cubicles and the data were automatically registered via personal computers.

Quality Control

In study 1 participant 5 was removed, because he made errors on 50% of all Stroop trials (1.6 % of the entire sample). Participant 33 was removed, because we were unable to find out which focus condition this participant was in (1.6% of the entire sample). Participants 46 and 59 were removed, because they reported to be color blind (3.1 % of the entire sample).

In study 2 ppt 13, 15 and 16 were removed because of a programming error(4.9 % of the entire sample). In study 2 ppt 17,31, 40, 42, 1005 and 10022 were removed because of color blindness (9.8 % of the entire sample). In study 2 Ppt 10012 was removed, because it was an outlier on our first analysis variable: Pers1ConFirstTwo (1.5% of the entire sample).

Participants that were removed from the analysis for any of the above reasons, are indicated with a 1 (instead of 0) under the variable NotUsed in the SPSS files.

Ethical issues

Both Studies 1 and 2 followed the ethical standards by the American Psychological Association. Data were anonymized by using participant numbers. Personal identifiers, such as names and e-mail addresses that were used for administrative reasons (payment, keeping track of previous participants to avoid double participation), were decoupled from the experimental data. Participants were informed in advance of both studies that they were free to discontinue participation at any time without having to state a reason. After both studies participants received a debriefing explaining the rationale behind the study and containing contact information of the experimenters.

(3) Dataset description

Object name

Replication Data for "When focusing on a goal interferes with action control: action versus state orientation and over-maintenance of intentions".

Data type

Primary data.

Format names and versions

The data are available as a .sav file (SPSS). Syntax files (.sps) for all analyses that were reported in the Over-maintenance of Intentions paper. The .sav files and .sps files were created with SPSS 17 for Windows. The data can be found at the repository Dataverse which offers the option to transform SPSS files of tab-delimited text files that are also useful for those who do not use SPSS.

Study1_RawData.sav
Study1_RawDataRecoded.sav

Study2_RawData.sav
Study2_RawDataRecoded.sav
MetaAnalysis.sav
Study1_SyntaxAnalyses.SPS
Study1_RecodeData.SPS
Study2_SyntaxAnalyses.SPS
Study2_RecodeData.SPS
MetaAnalysisSyntax.SPS

Data Collectors

The data of Study 1 were collected in 2008 by Hester Ruigendijk as a part of her Ph.D. dissertation, and by Mandy Tjew A Sin in 2013 as a research assistant, both at the VU University of Amsterdam. The data of Study 2 were collected in 2009 by Hester Ruigendijk as a part of her Ph.D. dissertation and by Mandy Tjew A Sin in 2013 as a research assistant, both at the VU University of Amsterdam.

Which experimenter collected which data can be found under the variable "Experimenter" in the SPSS file, with 1 indicating data collected by Hester Ruigendijk and 0 indicating data collected by Mandy Tjew A Sin.

Language

All the instructions in the experiments of both Studies 1 and 2 were in Dutch. Translated instructions can be found in the published article in the database. All variables were translated into English. In the datafiles, questions of the Action Control Scale are labeled in English. In the experiment the questions were originally asked in Dutch. A Dutch translation of the questionnaire can be found in a separate word file (ActionControlScaleDutchEnglish.docx). The questions of the Mood Scale were phrased in Dutch in the experiment. In the database, both the Dutch and English translation of the questions is available.

License

CC0.

Embargo

No embargo.

Repository location

DOI: http://dx.doi.org/10.7910/DVN/TA2YL3

Publication date

03/09/2015.

(4) Reuse potential

The data are of potential interest to cognitive psychologists, personality psychologists, social psychologists, or other researchers particularly interested in cognitive control and individual differences.

The dataset describes how individuals with different levels of action- versus state-orientation perform differently on tasks that measure cognitive control depending on whether they focus strongly (versus weakly) on the task goal.

The data can be used for aggregation, further analysis, reference, validation studies, and for teaching.

Acknowledgements

We thank Mandy Tjew A Sin for collecting part of the data of Studies 1 and 2.

Competing Interests

The authors declare that they have no competing interests.

References

1. **Ruigendijk, H A** and **Koole, S L** 2014 When focusing on a goal interferes with action control: action versus state orientation and over-maintenance of intentions. *Motivation and Emotion*, 38(5): 659–672. DOI: http://dx.doi.org/10.1007/s11031-014-9415-4
2. **Kuhl, J** and **Beckmann, J** 1994 Volition and Personality: Action versus state orientation. Göttingen, Germany: Hogrefe.
3. **Kuhl, J** 1994 Action versus state orientation: Psychometric properties of the Action Control Scale (ACS-90). In J. Kuhl & J. Beckmann (Eds.), Volition and personality: Action versus state orientation (pp. 47–59). Göttingen, Germany: Hogrefe & Huber.
4. **Kazén, M, Kaschel, R** and **Kuhl, J** 2008 Individual differences in intention initiation under demanding conditions: Interactive effects of state vs. action orientation and enactment difficulty. *Journal of Research in Personality*, 42: 693–715. DOI: http://dx.doi.org/10.1016/j.jrp.2007.09.005
5. **Smilek, D, Enns, J T, Eastwood, J D** and **Merikle, P M** 2006 Relax! Cognitive style influences visual search. *Visual Cognition*, 14: 543–564. DOI: http://dx.doi.org/10.1080/13506280500193487
6. **Stroop, J R** 1935 Studies of interference in serial verbal reaction. *Journal of Experimental Psychology*, 18: 643–662. DOI: http://dx.doi.org/10.1037//0096-3445.121.1.1
7. **Dreisbach, G** and **Goschke, T** 2004 How positive affect modulates cognitive control: Reduced perseveration at the cost of increased distractibility. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 30: 343–353. DOI: http://dx.doi.org/10.1037/0278-7393.30.2.343

Peer review comments: http://dx.doi.org/10.5334/jopd.22.pr

How to cite this article: Ruigendijk, H A H and Koole, S L 2016 When Focusing on a Goal Interferes with Action Control: Action Versus State Orientation and Over-maintenance of Intentions [1]. *Journal of Open Psychology Data,* 4: e5, DOI: http://dx.doi.org/10.5334/jopd.22

Published: 28 June 2016

Copyright: © 2016 The Author(s). This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC-BY 4.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited. See http://creavtivecommons.org/licenses/by/4.0/.

]u[*Journal of Open Psychology Data* is a peer-reviewed open access journal published by Ubiquity Press

OPEN ACCESS