Methodology file

Potential Moderators

Examining induced hypocrisy from both methodological and theoretical points of view revealed 14 potential moderator variables: Statement of Freedom before SNB, Statement of Freedom before Mindfulness, Public Nature of Transgression, Participant's Retribution, Normativeness of the Advocated Behavior, Order of Induction Steps, Country, Participant Gender, Participant Age, Delay of consequences, Type of Participant, Type of Study, Nature of Consequences of Transgression, and Type of Publication. However, a lack of information prevented us testing for the impact of nine of these variables. The potential moderators we were able to test were: *Nature of Consequences, Type of Publication, Type of Study, and Type of Participant*.

Identification of induced hypocrisy studies

Although our objective was to identify all published and unpublished studies dealing with induced hypocrisy, for practical reasons we restricted our search to papers written in English or in French. We searched 15 databases¹ over a period extending up to February 2017 and using just two keywords: "hypocrisy" (subject term) and "cognitive dissonance" (full text). The most recent article we found was published in June 2016 (Priolo et al., 2016). In addition, we conducted manual searches of our own files in order to find studies that did not appear in the electronic searches. Unpublished studies were identified by examining book chapters, literature reviews, and unpublished papers on induced hypocrisy (secondary sources). We also contacted five international psychology associations (International Association for People-Environment Studies, European Association of Social Psychology,

¹ Web of Science, Academic Search Premier, Business Source Complete, EconLit, Entrepreneurial Studies Source, ERIC, FRANCIS, MEDLINE, MLA International Bibliography, PsychEXTRA, PsychINFO, PsychARTICLE, Psychology and Behavioral Sciences Collection, Soc Index with Full text, SPORTDiscus with Full text.

International Association of Applied Psychology, Association pour la Diffusion de la Recherche Internationale en Psychologie Sociale, Association pour la Recherche en Psychologie Environnementale) and two research networking websites (Open Science Framework, ResearchGate). Finally, we sent emails to researchers in the induced hypocrisy field, asking them for details of any unpublished studies in their possession. In total, we identified 66 published and unpublished studies carried out between 1984 and 2016.

Inclusion and exclusion criteria

Our initial corpus of papers included all studies that:

- Examined the induced hypocrisy procedure as defined above. Therefore, we excluded studies involving other paradigms, such as induced compliance (Heitland & Bohner, 2010), moral hypocrisy (Lammers & Stapel, 2011), and vicarious hypocrisy (Barden, Rucker, & Petty, 2005; Thompson, Kyle, Swan, Thomas, & Vrungos, 2002). In some studies we did not take into account conditions in which participants were assigned to a crossed factor, such as misattribution (Fried & Aronson, 1995) or self-affirmation (Yousaf & Gobet, 2013), in addition to an induced-hypocrisy condition.
- 2. Were reported in scientific journals, conference proceedings, book chapters, or doctoral theses (published or unpublished). However, we excluded three studies reported in master's theses (Biga, 2004; Dossett, 2009; Goldonowicz, 2012).
- Included at least the classic induced hypocrisy condition as defined above (including both steps). This led us to exclude six studies (Aitken, McMahon, Wearing, & Finlayson, 1994; Desrichard & Monteil, 1994; Fernandez-Dols et al., 2010; Harmon-Jones et al., 2003; Takaku, 2001; Takaku, Weiner, & Ohbuchi, 2001).

4. Mentioned the statistical data needed for our analyses. Where necessary, we wrote directly to authors to obtain the information we needed. We excluded three theoretical studies (Freijy & Kothe, 2013; Stone & Fernandez, 2008; Stone & Foccella, 2011) and four studies that did not collect the statistical data needed for our analyses (Bator & Brian, 2007; Matz & Wood, 2005; Peterson et al., 2008; Stone & Fernandez, 2011).

Finally, because the aim of induced hypocrisy is to prompt changes in behavioral intention or behavior, we excluded four studies which measured attitude change (Martinie & Fointiat, 2010; McConnell & Brown, 2010; McGrath & Ward, 2014, McKimmie et al., 2003).

These criteria led us to reject 28 studies (see Table 1), leaving us with a final corpus 38 studies (see Table 2).

Table 1

Excluded Studies

References

Aitken, Mcmahon, Wearing, & Finlayson (1994)

Barden, Rucker, & Petty (2005)

Bator & Bryan (2007)

Biga (2004)

Desrichard & Monteil (1994)

Dossette (2009)

Fernandez-Dols, Aguilar, Campo, Vallacher, Janowsky, Rabbia, Brussino, & Lerner (2010)

Fointiat, Priolo, Saint-Bauzel, & Milhabet (2013, study 2)

Freijy & Kothe (2013)

Goldonowicz (2012)

Harmon-Jones, Peterson, & Vaughn (2003)

Heitland & Bohner (2010)

Lammers & Stapel (2011)

Martinie & Fointiat (2010)

Matz & Wood (2005)

McConnell & Brown (2010)

McGrath & Ward (2014, study 2)

McKimmie, Terry, Hogg, Manstead, Spears, & Doosje (2003, principal study)

Pelt (2016, studies 2 & 3)

Peterson, Haynes & Olson (2008)

Stone & Fernandez (2011)

Stone & Foccella (2011)

Stone, Wiegand, Cooper, & Aronson (1997, study 2)

Takaku (2001)

Takaku, Weiner, & Ohbuchi (2001)

Thompson, Kyle, Swan, Thomas, & Vrungos (2002)

Vinski & Tyron (2009)

Note: Studies are listed by alphabetical order of author.

Table 2
Summary of All Studies Included in the Meta-Analysis

Study	Measures	Experimental group	Type of participants	Types of studies	Nature of consequence	Type of publication
Aronson, Fried, & Stone (1991)	INT	CTR, SNB, TRANS	STD	LAB	SLF	6,55
Dickerson, Thibodeau, Aronson, & Miller (1992)	BHV	CTR, SNB, TRANS	STD	FLD	ОТН	2,79
Eitel & Friend (1999)	BHV INT	CTR	STD	LAB	OTH	6,14
Fointiat & Grosbras (2007, study 1)	INT	CTR, SNB	STD	LAB	ОТН	2,37
Fointiat & Grosbras (2007, study 2)	INT	CTR	STD	LAB	OTH	2,37
Fointiat (2004)	INT	SNB	UN-STD	FLD	OTH	2
Fointiat (2008)	INT	CTR, SNB	STD	LAB	OTH	2
Fointiat, Morisot, & Pakuszewski (2008)	INT	CTR, SNB	STD	LAB	ОТН	2,34
Fointiat, Priolo, Saint-Bauzel, & Milhabet (2013, study 1)	INT DCF	SNB	STD	LAB	ОТН	2
Fointiat, Somat, & Grosbras (2011)	INT	CTR	STD	LAB	ОТН	2,31
Fried & Aronson (1995)	INT	SNB	STD	LAB	OTH	4,99
Fried (1998, study 1)	INT	SNB	STD	LAB	OTH	3,16
Fried (1998, study 2)	INT	SNB	STD	LAB	OTH	3,16
Hammons (2010)	BHV DCF	CTR	STD	LAB	SLF	1
Kantola, Syme, & Campbell (1984)	BHV	CTR	UN-STD	FLD	ОТН	6,79

Table 2. continued						
Liégeois (2005, study 1)	INT	CTR	STD	LAB	OTH	1
Lopez, Lassare, & Rateau (2011)	INT	CTR	UN-STD	FLD	OTH	2,33
McGrath & Ward (2014, study 1)	DCF	SNB	STD	LAB	SLF	1
McKimmie, Terry, Hogg, Manstead, Spears, & Doosje (2003, pilot study)	DCF	SNB	STD	LAB	ОТН	3,173
Morongiello & Mark (2008)	BHV INT	CTR	UN-STD	FLD	SLF	4,28
Pelt (2016, study 0)	BHV	CTR, SNB, TRANS	UN-STD	FLD	OTH	1
Pelt (2016, study 1)	BHV INT DCF	CTR	STD	LAB	ОТН	1
Priolo (2016, pre-test study)	BHV DCF	CTR, SNB, TRANS	STD	FLD	OTH	4,4
Priolo & Liégeois (2008, study 1)	INT	CTR, SNB, TRANS	STD	FLD	SLF	2
Priolo & Liégeois (2008, study 2)	INT	CTR, SNB, TRANS	UN-STD	FLD	SLF	2
Priolo & Liégeois (2008, pretest study 2)	DCF	CTR	STD	LAB	SLF	2
Rubens (2011, study 0)	INT	TRANS	STD	LAB	OTH	1
Rubens (2011, study B1)	INT	CTR, SNB, TRANS	UN-STD	FLD	ОТН	1
Rubens (2011, study B2)	INT	CTR, SNB, TRANS	UN-STD	FLD	OTH	1
Rubens (2011, study B4)	BHV	CTR, SNB, TRANS	UN-STD	FLD	OTH	1

Table 2. continued						
Rubens, Gosling, Bonaiuto, Brisbois, & Moch (2015)	BHV	CTR SNB	UN-STD	FLD	ОТН	4,61
Sénémeaud, Mange, Fointiat, & Somat (2013)	INT	CTR	UN-STD	FLD	SLF	2,98
Son Hing, Li, & Zanna (2002)	BHV	SNB	STD	LAB	ОТН	4,5
Stone, Aronson, Crain, Winslow, & Fried (1994)	BHV INT	CTR SNB, TRANS	STD	LAB	SLF	4,9
Stone, Wiegand, Cooper, & Aronson (1997, study 1)	BHV	SNB, TRANS	STD	LAB	SLF	6,73
Yousaf & Gobet (2013, study 1)	DCF	CTR	STD	LAB	SLF	3,38
Yousaf & Gobet (2013, study 2)	DCF	CTR	STD	LAB	SLF	3,38
Yousaf & Gobet (2013, study 3)	DCF	CTR	STD	LAB	SLF	3,38

Note: Studies are listed by alphabetical order of author; N: number of participants; Measure(s): behavioral (BHV), intention (INT) and discomfort (DCF); Experimental group: control (CTR), normative saliency (SNB), transgression only (TRANS); Type of participants: student (STD) vs. other (UN-STD); Type of studies: field (FLD) vs. laboratory (LAB); Nature of consequence: self-targeted (SFL) vs. others-targeted (OTH); Type of publication: 1 for unpublished studies, 2 + impact factor for published studies

Meta-analytic procedure

We carried out our meta-analysis in line with the recommendations made by Borenstein, Hedges, Higgins, and Rothstein (2009). First, because the studies in our corpus reported effect sizes in a variety of ways, including t-tests (e.g., Stone et al., 1994), χ^2 -tests (Fointiat, 2008), and F-tests (e.g., Morongiello & Mark, 2008), we used Arthur, Bennett, and Huffcutt's (2001) formulae to transform all reported effect sizes into correlation coefficients, r. We then transformed these effect sizes so that the correlation coefficient was positive when behavioral intention or behavior was greater in the induced hypocrisy condition than in the control condition. Finally, we used a Fisher's z transformation to calculate weighted effect sizes. Second, we used a random effects model (for analyses without moderators) and a mixed effects model (for analyses including moderators) in order to take into account the wide range of studies (country, type of participant, type of behavior, and implementation procedure). This allowed us to explain systematic variance by adding multiple moderators and to generalize it to the entire corpus of studies (Viechtbauer, 2010). We used Comprehensive Meta-Analysis 3 software to estimate these models (Borenstein et al., 2009) and completed our analyses by using the Metafor package in R (Viechtbauer, 2010). For instance, we used Metafor to estimate the amount of heterogeneity, τ^2 , with the restricted maximum likelihood estimator.

In addition, because our analyses had to take into account studies that used more than one measure of the same construct (i.e., Fointiat & Grosbras, 2007, multiple behavioral measures), in which case effect sizes are statistically dependent, we followed Lipsey and Wilson's (2001) recommendation and averaged the relevant effect sizes. This procedure yielded a single mean effect size for each sample. For studies that included longitudinal measures (Eitel & Friend, 1999; Hammons, 2010; Kantola et al., 1984; Pelt, 2016), we calculated effect sizes using only the data collected just after the experimental induction. In other words, we excluded the longitudinal measures.

Finally, we used the regression method described by Borenstein et al. (2009) to test the impact of potential moderators on the effect sizes. At least three studies in each condition were needed in order to run the categorical-moderator analyses.

Publication bias in the effect of hypocrisy versus control on behavioral intention.

Because all methods of testing for publication bias have limitations (see Field & Gillet, 2010), we used four complementary techniques: funnel plot, trim and fill (Duval & Tweedie, 2000), *p-curve* analysis (Simonsohn, Nelson, & Simmons, 2014), and R-index (Schimmack, 2016).

Detailed results of these analyses are provided in the supplementary materials.