A bottom-up perspective of power: Testing main effects, postive effects, and exploring for unknown effects

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Abstract

Power is a much-studied topic. The main effects of power include corruption, distrust, unrestrained behaviour, and selfish behaviour (i.e., negative effects). Power also can lead to positive effects such as perspective taking, accountability and responsibility. In this study these effects have been replicated. The current research employs a new technique of studying the effects of power. More specifically, one hundred and thirty seven essays that people wrote about their experiences with power were analysed. By analysing the contents of these stories, the previously found main effects of power were replicated. Furthermore, the results of this research showed that power holders attribute their actions externally, feel guilty, feel anxious and tend to be greedy.

*Keywords***:** Powers, bottom-up perspective, perspective taking, accountability, responsibility.

Introduction

Power has been redefined many times in the last decades. Theories have been developed, adjusted, and criticized. But do these definitions actually resemble the way people define and experience power? In the current research we employ a bottom-up approach to power to compare theoretical with practical approaches. Generally speaking, the majority of current studies about the main effects of power demonstrate a negative view on the topic. The current research will attempt to search for more positive effects of power, besides the main, predominately negative effects. An bottom-up perspective, will provide us with information about how lay people describe, feel, and experience power. This perspective will determine effects and behaviours. In the following section definitions and the main effects of power will be described. Furthermore, the academic debate concerning the positive effects of power will be discussed.

Power definitions. The standard theory about power examines a process of resource control. That is, one has power when one controls resources that others desire or value (Fiske, 2010). For example, a boss has control over promotions and increases of salary. A resource can be defined as something needed by another. French and Raven (1959) and Raven (1965, 1993) described six possible bases that one can have power over: coercive power (capacity to punish), reward power (capacity to reward), legitimate power (social rights to let others obey), expert power (being superior by possessing skills), referent power (the most admired individuals in a group), and informational power (information can be provided, which is unknown for others). This control over resources can, as such, lead to an increase in influence over others (Turner, 2005). Indeed, Turner (2005) argues that power stems mainly from persuasion, authority and coercion. His three-process theory states that influence, given by psychological groups formation, is the basis of power. When one can influence others, one gains access to resource control. In other words, the three-process theory argues that resource

control and influence are mutually reinforcing (Turner, 2005). Being able to influence others

through one's resource control has implications for one's beliefs and behaviour. For example,

political parties choose their leader democratically, the intended leaders can convince other

party members why they should be their leader. When elected as a leader, one is closer to the

resources. For example, he or she can make important decisions and is able to make

declarations on the party's financial resources. Anderson, John and Keltner (2012) found that

in social contexts the personal sense of power is coherent. That is, there is a relationship

between the beliefs of individuals that they can get their way in a social relationship and that

they can influence another individual's attitude. Furthermore, Anderson and his colleagues

(2012) argue that the social sense of power was related to actually controlling valuable

resources in organizations. Importantly, having power matters for the power holder.

Prior research on effects of power. As previously discussed, power is control over

resources. This can give power holders a personal sense of having power (Anderson et al.,

2012). This sense can lead to unrestrained behaviour, distrust, corruption and selfish

behaviour (Kipnis, 1972; Anderson & Berdahl, 2002; Galinsky, Gruenfeld & Magee, 2003;

Keltner, Anderson & Gruenfeld, 2003; Georgesen & Harris, 2006; Fast & Chen, 2009;

Kunstman & Maner, 2011). For example, Georgesen and Harris (2006) found evidence that

bosses who have negative expectations about their subordinates will rate them lower and

award them less money. Furthermore, power affects power holders perceptions and

expectations of sexual interest of subordinates (Kunstman & Maner, 2011), power leads to

action demonstrated by Galinsky and his colleague's (2003) where participant primed with

power turn off a annoying fan, and power decreases perspective of their subordinate and

lowers trust in their subordinates. (Galinsky, Magee, Inesi & Gruenfeld, 2006; Mooijman,

Van Dijk, Ellemers, Van Dijk & Kawakami, 2015). Explanations of these effects could be

that power holders are less inhibited or have the tendency to approach (Anderson & Berdahl,

2002). Correspondingly, the approach/inhibition theory (Keltner et al., 2003) argues that

power leads to approaching behaviour and individuals who are powerless are inhibited.

Power activates the behaviour approach system (BAS) and low power activates the behaviour

inhibition system (BIS). When the BAS is activated individuals have more attention for

rewards, the BAS leads to more positive emotions, there is more automatic cognition, and

disinhibited behaviour. Activating the BIS leads attention to losses, more negative emotion,

systematic and more controlled cognition, and inhibited behaviour.

The literature described above may lead to the conclusion that power is a negative

thing. Is it possible that this is untrue and that there are possible positive effects of power?

Galinsky and his colleagues (2003) demonstrated that people in a power position contributed

more in to a resource but similarly took more from a resource. This example already seems to

convey a more positive notion of power. There are several studies that have found proof for

positive effects and that have shown circumstances wherein power may lead to a positive

outcome. In an experimental study of Galinsky and his colleagues (2014) power holders (in

this case decision makers) were primed with perspective taking, which increased their

tendency to explain their decisions respectfully and frankly (interactional justice). The

combination of perspective taking and power resulted in a synergistic effect. Moreover,

power holders can be more interpersonally sensitive, defined as correctly assessing another

person, without attributing characteristics, emotions, thoughts, or intentions to another person

incorrectly (Hall & Bernieri, 2001; Schmid-Mast, Hall & Klaus, 2009). In a study of Pierro,

Raven, Amato and Belanger (2013) evidence was found that transformational or charismatic

leadership styles were positively related to the willingness of employees to comply with the

soft power bases described in the IPIM (Interpersonal Power Interaction Model; Raven,

2008). This will lead to more organizational commitment and less turnover. Furthermore,

power reduces fear of a negative evaluation and leads to less signs of nervousness and

therefore performance is evaluated more positively for the power holder. In other words,

power increases performance (Schmid & Schmid Mast, 2013). Moreover, power holders tend

to feel more positive emotions and make a healthier impression overall (Keltner et al., 2003).

 Power can lead to positive outcomes for power holders but also for targets or

subordinates, but based on the current academic literature on the topic, it seems that power

necessitates a moderator (e.g.: leadership, perspective taking) to ultimately result in a positive

or at least a non-negative outcome (Pierro et al, 2013; Galinsky et al, 2014).

In summary, the main effects of power are: power can lead to corruption, power

holders have trouble taking perspective, power leads to unrestrained and selfish behaviour,

and power gives low levels of trust to subordinates. Generally, more positive effects of power

are seen in studies only in combination with a moderator.

Predictions. Many theories and studies discussed above may only be described in the

literature and do not give information about occurrence in life. More specifically, the research

methods mainly are experimental or in artificial settings. Therefore, the main question of this

current study is: do people report the main effects of power, described in the literature above,

in their normal, day-to-day life? And how do lay people define power? Furthermore, how do

they describe the positive effects of power that power can have? Finally, in the view of the

bottom-up research, are there effects of power that until now have been undiscovered?

Replication of main effects. It is predicted that the effects of power will be

replicated. Corruption, decreased perspective taking, distrust, unrestrained, and selfish

behaviour will be described in terms of egoistic behaviour, distrust, disinhibited behaviour,

legitimacy and less perspective taking. These predictions of power are in line with the

literature of power (Kipnis, 1972; Anderson & Berdahl, 2002; Galinsky et al., 2003; Keltner

et al., 2003; Georgeson & Harris 2006; Fast & Chen, 2009; Kunstman & Maner, 2011).

Power definitions by lay people. Controlling others is a way to reach goals. Correspondently, controlling others is taking action to reach goals (Galinsky et al., 2003). When people are in a power position they are most likely a leader or a decision maker within a group. The position of the power holder makes them believe they have to take control or take action. They think their position is accompanied by this expectation. Therefore, power will be reported as control over others and taking action.

Self-affirmation is when a person endorses him or her self by asserting their value. Power holders feel important. Their personal sense of power (Anderson, 2012) makes them believe they actually are. In contrast, subordinates act as if the more powerful persons surrounding them are more important. Since power holders take less perspective they endorse themselves and believe that the outcome of the group is due to their effort and leadership, ultimately leading to self-affirmation (Galinsky et al., 2006).

Positive predictions about power. People will describe power as a responsibility, that they are able to take the perspective of situations of others and report that they feel accountable for their actions, because this is a more justified way of social coherence (Galinsky et al., 2014). However, accountability and perspective taking were used as a prime in Galinsky's research. Power holders will report these variables because their social environment makes them more alert to them. For example, people realise they are in a powerful position and have more social awareness because the group that they are a part of has a strong social coherence.

Predictions about emotions. Power holders will report happiness and that they feel content. This is in line with the activation of the BAS (Keltner et al., 2003). Furthermore, power holders will report that they have more anger towards their subordinates due to the fact that power holders who feel incompetent show more anger (Fast & Chen, 2009). Exploring for more emotions, power holders will report feelings of anxiousness, guilt and enviousness.

Hall and Bernierie (2001) argue that people in high power show higher interpersonal sensitivity, which entails that people in power positions are motivated to assess others correctly. When power holders are not competent (Fast & Chen, 2009) they can show more anger but due to interpersonal sensitivity power holders report guilt and anxiousness.

Furthermore, power holders could feel threatened in their status and therefore have envious feelings. Distrust, non-perspective taking and egoistic behaviour can cause these feelings for a power holder because he or she expects to be the most important and to be rewarded. He or she will be surprised when someone else is designated that role (Kipnis, 1972; Keltner et al., 2003; Galinsky et al., 2006; Mooijman et al., 2015).

Unknown effects. Hopefully some unknown effects or descriptions of power will be found. Evidently predictions about unknown effect cannot be made for this research.

Method

Participants.

Previously to this research, psychology students of the University of Leiden have written essays with regards to power during earlier studies. For this study, data was collected from these essays (n= 138). One essay has been left out of this research as it described a powerless position, thus bringing the final sample to 137. Since the students were not asked to note their gender and age, these variables have bot been taken into account. Nevertheless, we are able to assume that the larger part of the sample exists of females and has a mean age of 22, based on the grand mean of the students studying psychology at Leiden University.

Design and procedure.

In the study by Galinsky and his colleagues (2003), experiments where conducted by priming individuals with power. They were asked to write an essay about the last time they had control or power over others. Below, one example of the essay instruction is given.

"Please recall a particular incident in which you had power over another individual or individuals. By power, we mean a situation in which you controlled the ability of another person or persons to get something they wanted, or were in a position to evaluate those individuals. Please describe this situation in which you had power— what happened, how you felt, etc." (Galinsky et al., 2003, p. 458).

The majority part of the respondents described power situations at their work (16.10%) where people are in charge of other people. Furthermore, people described situations where they experienced being the leader of a study workgroup (14.60%), situations were they are leading or training children in sports or camps (11.70%), situations where they coached or lead sport teams at membership clubs, situations where they were chairman or chairwoman of a student society (10.90%), situations where they are babysitting (8.00%), and situations where they were teaching during a internship at primary or high school (8.00%). The essays written by the respondents revealed that 5.10% was judging others during a task, for instance during a selection of sport teams or acting as a referee during a soccer match. A smaller percentage (2.20%) described a relationship where love is involved. Finally, 13.10% of the respondents described various other types of power situations. For example, a respondent described having hid the remote of the television or being in a situation where they had borrowed money.

Subsequently, for this research, the essays were screened and coded by two judges. To search the main effects of power the coding system will use different definitions for effects. For an overview of the effects and the definitions see the appendix. The main effects of power were screened on the variables 'legitimacy', 'perspective taking', 'distrust', 'disinhibited behaviour', and 'egoistic behaviour'. Furthermore, emotions ('anxiety', 'anger', 'envy', 'guilt', and 'sadness') of power were rated. Expectations about how lay people described power were rated as 'control', 'self-affirmation', 'responsibility', and

'accountability'. 'Perspective taking', 'responsibility' and 'accountability' were rated as

positive effects of power. Finally, the judges rated the essays for unknown effects of power.

When one of the definitions described above was found in the essays it was coded with

a '1' and if not, with a '0'. When found the occurrence was rated on a 7-point Likert scale

(e.g.: Distrust: 1. *I distrust others a little bit…, 7: I distrust others very much*). In the

Appendix an overview is given of the definitions and variables that were used by the judges.

Analysis. To check the internal consistency of the nominal outcomes Cohen's kappas

were calculated. Following the divisions of Landis and Koch, agreements between 'Fair' and

'Almost perfect' ($0.21 \leq \kappa \leq 1.00$) were used (1977). According to these authors: "the

divisions are arbitrary but provide useful benchmarks for the discussion" (Landis & Koch; p.

165).

For internal consistency of the interval variables Cronbach's alpha was calculated.

George and Mallery (2003) provided divisions for interpreting Cronbach's alpha. All alphas

above .50 are used. According to this division, all alphas between .50 and .60 are called

'Poor', all alphas under .50 are specified as 'Unacceptable'. Concluding on these

benchmarks, this research is following the definition of George and Mallery (2003), using

only alphas that can be defined as 'Acceptable', meaning that all alphas above .50. Both

divisions for kappa and alpha are given in table 1.

Table 1
Divisions of Kappa and Alpha (Landis & Koch, 1977; George & Mallery, 2003).

Kappa	Agreement	Alpha	Internal C.
< 0	Less than chance	$\alpha < .5$	Unacceptable
.01 - .20	Slight	$0.6 > \alpha \geq 0.5$	Poor
.21 - .40	Fair	$0.7 > \alpha \geq 0.6$	Questionable
.41 - .60	Moderate	$0.8 > \alpha \geq 0.7$	Acceptable
.61 - .80	Substantial	$0.9 > \alpha \geq 0.8$	Good
.81 - .99	Almost Perfect	$\alpha \geq 0.9$	Excellent

Moreover, percentages are calculated to give an overview which variables are found.

Furthermore, one sample t-tests are calculated to control if the means differ from zero.

Finally, Pearson correlations were calculated to search for relationships between variables.

Only significant outcomes (both means and correlations) will be used.

Results

Agreements and internal consistency. The kappas showed a way of interpreting the

degree of agreement among judges and the alphas reveal the internal consistency of the

ratings. All agreements are between 'fair' and 'almost perfect' ($.33 \leq \kappa \leq .86$) and the internal

consistency is between 'poor' and 'excellent' ($.51 \leq \alpha \leq 1.0$). An overview of all kappas and

alphas is given in table 2. The results will be discussed by following the hypotheses in the

next section.

Main effects of Power. In 40.10% of the essays respondents reported 'legitimacy'**.**

People reported moderate levels of 'legitimacy' ($M = 3.89$). In 47.40% of the essays

participants did not reported any kind of 'perspective taking'. This means that 52.60%

reported that they do take perspective. 'Distrust' is reported in 15.30% of the essays.

Indicating that people did not substantial trust in their subordinates on a moderate level ($M =$

3.29). 'Disinhibited behaviour' occurred in 56.90% of the essays and may also be taken as

evidence, although powerful individuals have moderate levels ($M = 3.90$) to take action, it

indeed occured in the essays. In 54.00% of the essays people reported 'egoistic behaviour',

with moderate levels ($M = 4.07$). Note that the agreement is 'Fair'.

Definitions by lay people. In 79.60 % of the essays 'control others' was found.

Individuals in powerful positions have a medium tendency to control others ($M = 4.11$).

Furthermore, they described power in terms of 'self-affirmation' (35.00%) on a moderate

level ($M = 3.64$).

Positive effects of Power. In 52.60% of the essays individuals do took perspective on

a moderate level ($M = 3.06$). 'Accountability' is found in 52.60% of the essays. People felt

moderate levels of accountability ($M = 3.47$). Finally, responsibility for others was found in

20.40% of the essays. People reported higher than moderate levels of responsibility over

outcomes of others ($M = 4.52$)

Emotions. A remarkable result is that in 40.10% of the essays, power holders

reported feelings of anxiety. They felt moderate levels of anxiety ($M = 3.63$) Furthermore,

power holders reported that they are happy when they are in a powerful position (46.00% of

the essays, $M = 4.39$) and felt envious (20.40%) towards others ($M = 3.82$). Less than

expected, people reported anger in just 3.60% of the essays. When they were angry they

reported moderate levels of anger ($M = 4.00$). In 10.9% of the essays individuals felt guilty

about their actions when they were in a powerful position. People reported moderate levels of

guiltiness ($M = 3.67$). In 21.00% of the essays individuals in a powerful position were proud

of their action, status or effort. Individuals reported moderate levels of pride ($M = 3.93$).

External attribution. During the rating process, the judges found an interesting

variable. When respondents were in a powerful position, they tended to attribute their action

externally (27.00%). The participants were explaining their actions or decisions due to the

fact that they were in that position and were forced to act in a certain way. Attribution was

reported moderate ($M = 3.43$).

Table 3
Overview of outcomes (Kappa, Alpha, and Percentage).

	Kappa	Agreement	Alpha	Intern C.	%
Egoistic Behaviour	.38	Fair	.56	Poor	54.00
Perspective Taking	.45	Moderate	.63	Questionable	52.60
Disinhibited Behaviour	.47	Moderate	.72	Acceptable	56.90
Distrust	.49	Moderate	.94	Excellent	15.30
Control Others	.45	Moderate	.70	Questionable	79.60
Control Self	.38	Fair	.58	Poor	48.20
Responsibility Others	.33	Fair	.51	Poor	20.40
Responsibility Self	.24	Slight	1.0	Excellent	16.80
Accountability	.44	Moderate	.70	Questionable	52.60
Legitimacy	.46	Moderate	.75	Acceptable	40.10
Self-affirmation	.50	Moderate	.54	Poor	35.00
Happiness	.79	Substantial	.82	Good	46.00
Anxiety	.86	Almost Perfect	.54	Poor	40.10

Anger	.53	Moderate	.74	Acceptable	3.60
Envy	.59	Moderate	.80	Acceptable	20.40
Sadness	.59	Moderate	.72	Acceptable	2.90
Guilt	.69	Substantial	.92	Excellent	10.90
External Attribution	.56	Moderate	.74	Acceptable	27.00
Pride	.68	Substantial	.89	Good	21.90

Comparing rated means. All means differed significantly from zero ($p < .001$)

Except for 'anger' ($t = 6.33$; $p = .003$) and 'sadness' ($t = 4.38$; $p = .22$). 'Sadness' is non

significant. Below, in table 4, all means, t- values, p-values and confidence intervals are

given.

Table 4

Overview of outcomes (t-values, df, Means, p-values, and Confidence Interval).

	t	df	Sig. (2-tailed)	Difference	95% CI	
					Lower	Upper
Egoistic Behaviour	22.35	73	< .001	4.07	3.71	4.43
Perspective Taking	18.61	71	< .001	3.06	2.73	3.38
Disinhibited Behaviour	25.24	77	< .001	3.90	3.59	4.21
Distrust	10.12	20	< .001	3.29	2.61	3.96
Control Others	26.91	108	< .001	4.11	3.81	4.41
Control Self	22.97	65	< .001	4.17	3.80	4.53
Responsibility Others	16.45	28	< .001	4.52	3.96	5.08
Responsibility Self	15.00	22	< .001	4.00	3.45	4.55
Accountability	24.59	71	< .001	3.47	3.19	3.75
Legitimacy	20.66	54	< .001	3.89	3.51	4.27
Self-affirmation	21.34	46	< .001	3.64	3.30	3.98
Happiness	22.99	64	< .001	4.39	4.00	4.77
Anxiety	19.26	55	< .001	3.63	3.25	4.00
Anger	6.33	4	.003	4.00	2.24	5.76
Envy	12.73	27	< .001	3.82	3.21	4.44
Sadness	4.38	3	.022	4.00	1.10	6.91
Guilt	6.90	14	< .001	3.67	2.53	4.81
External Attribution	15.07	36	< .001	3.43	2.97	3.89
Pride	14.99	29	< .001	3.93	3.40	4.47

Pearson correlations. Individuals in powerful positions who reported egoistic

behaviour will also have the need or tendency to control others and have control over their

own outcomes. Moreover, they think they have the right to act like they do because of their

position. As can be seen in table 5.1 and 5.2, 'egoistic behaviour' is positively correlated with

'disinhibited behaviour' ($r = .40$; $p < .01$), 'control others' ($r = .35$; $p < .01$), 'control self'

($r = .43$; $p = < .01$), and 'legitimacy' ($r = .55$; $p < .01$). All correlations discussed above were

between medium and large and support some main effects of power.

Furthermore, some unexpected correlations were found between 'distrust' and 'envy'

($r = .79$; $p < .05$). People who distrust others also reported envious feelings towards others.

This envious emotion is also apparent when respondents felt the need to control own

outcomes ($r = .58$; $p < .01$) or control the outcomes of others ($r = .47$; $p < .05$). Moreover,

when having envious feelings individuals reported 'egoistic behaviour'

($r = .69$; $p < .01$). Individuals who think they have the right to act in a certain way did not

reported anxiety ($r = -.50$; $p < .05$). The same results were found for 'self-affirmation'.

Consequently, a respondent will not feel anxious as they were focused on asserting their

value or strength ($r = -.49$; $p < .05$). Anxious feelings were also non-existent when feelings of

pride occurred ($r = -.65$; $p < .05$). Finally, being proud was accompanied with ideas of

legitimacy ($r = .82$; $p < .01$). Unfortunately, there were no relations found who support

positive effects of power.

Table 5.1

Pearson correlations between interval variables.

	Egoistic behaviour	Perspective Taking	Disinhibited Behaviour	Distrust	Control Others	Control Self	Responsibility Others	Responsibility Self	Accountability	Legitimacy
Egoistic Behaviour	1									
Perspective Taking	-.03	1								
Disinhibited Behaviour	.40**	.03	1							
Distrust	.16	-.48	.02	1						
Control Others	.35**	.04	.36**	.62*	1					
Control Self	.43**	-.15	.27	.48	.66**	1				
Responsibility Others	-.28	-.07	.52	.b	.01	.51	1			
Responsibility Self	.44	-.11	-.11	.36	.41	.46	.53	1		
Accountability	.25	.16	-.01	-.14	.07	.33	.29	.44	1	
Legitimacy	.55**	-.29	.07	-.03	.29*	.44**	-.15	.24	.08	1
Self-affirmation	.34	.09	.22	.17	.08	.15	-.23	.13	-.28	.33
Happiness	.05	.18	.16	-.03	.24	.24	-.02	-.15	-.07	.34
Anxiety	.06	.00	.32	.02	-.14	-.10	.08	-.11	.09	-.50*
Anger	.42	.b	.53	.b	-.50	-.63	.b	.b	.b	.b
Envy	.69**	-.15	.40	.794*	.47*	.58**	.33	.94	.10	.14
Sadness	.b	-.89	.b	-.50	-.04	.69	.b	.b	.76	.76
Guilt	.22	-.10	.40	.02	-.23	.03	.b	.b	.46	-.11
Attribution	.35	-.03	.14	.22	.13	.40	-.01	-.07	.15	.42
Pride	.20	.31	-.23	-.09	.0	.11	.36	.54	.44	.82**

** Significant at the .01 level (2-tailed).

* Significant at the .05 level (2-tailed).

b. No correlation because at least one of the variables is constant.

Table 5.2

Pearson correlations between interval variables.

	Self-affirmation	Happiness	Anxiety	Anger	Envy	Sadness	Guilt	Attribution	Pride
Egoistic Behaviour									
Perspective Taking									
Disinhibited Behaviour									
Distrust									
Control Others									
Control Self									
Responsibility Others									
Responsibility Self									
Accountability									
Legitimacy									
Self-affirmation	1								
Happiness	.32	1							
Anxiety	-.49*	-.05	1						
Anger	.^{b}	.^{b}	.50	1					
Envy	.38	.40	-.12	.00	1				
Sadness	-.76	.^{b}	-.37	.^{b}	.^{b}	1			
Guilt	-.64	.32	.00	.^{b}	.35	.^{b}	1		
Attribution	-.04	.46	-.05	.^{b}	.27	.28	.52	1	
Pride	.38	.37	-.65*	.^{b}	-.37	.^{b}	.^{b}	.00	1

** Significant at the .01 level (2-tailed).

* Significant at the .05 level (2-tailed).

b. No correlation because at least one of the variables is constant.

Discussion

Main effects and definitions by lay people. The main effects of power (corruption, less perspective taking, distrust, unrestrained, and selfish behaviour) defined in terms of 'egoistic behaviour', 'distrust', 'disinhibited behaviour', 'legitimacy' and, 'less perspective taking' are found in this research. First of all, power occurs in terms of legitimacy. Lay people describe their power position as having the right to act as they do. This behaviour can lead to corruption since people think they have more right to rewards than others. When being in control of a resource, powerful individuals think they have more right of using the resource, or behave like they earn a reward more than others (Kipnis, 1972; Keltner, 2003). Second of all, power holders do not take any kind of perspective of another person's situation. This can be explained by the fact that power holders find it hard to take perspective (Galinksky et al., 2006). However, it is questionable to conclude this when the data being used is rated as 'perspective taking'. Perhaps the evidence would be stronger if the judges had rated on 'Is this person reporting that he or she is not taking any perspective?' Thirdly, this research found that individuals in powerful positions distrust their subordinates. Although distrust is not reported in many of the essays, the moderate levels of distrust indicates that these individuals indeed think their subordinates are not to be trusted, but distrust does not exist to an extreme extent. They might think their position makes them simply better than others and they will try to control others (Mooijman et al., 2015). Fourth, a large number of powerful individuals take action. For example, power holders give people contracts to pay off their guilt, or evaluate others to be part of a sports team. Similar to what the study of Galinsky and colleague's (2003) demonstrated, power holders take action just like switching off the annoying fan in their study. Finally, powerful individuals place their own outcome before the outcomes of others. This egoistic behaviour is frequently described in the literature. All of the above findings provide proof that the main effects of power occur

in normal life. More importantly, it is interesting to determine if it is possible to explain why lay people tend to behave in this way. First this study will try to answer the following question: How do lay people describe power? Since power holders have a need for controlling others, as seen in the results of this study this shows strong proof that people think power equals controlling. This can be explained by the fact that when people think their outcome is more important than another person's outcomes they will try to control others to assure their own outcome is not threatened. By controlling other people a power holder needs to act (Keltner et al., 2003), and needs to pressure others to keep them under control. This can only be done if the respondent is in a context where he or she has the right to be coercive (French & Raven, 1959) as they are the most important of the group. The positive relation between 'egoistic behaviour' and 'controlling others', 'disinhibited behaviour', and 'legitimacy' supports this explanation. Moreover, powerful individuals describe power in terms of self-affirmation. Which could lead us to conclude that people endorse their own actions to assure their own outcome is ultimately better then others.

Positive Effects. As expected, power holders able to take the perspective of others. Furthermore, they tend to feel accountable for their action, and power holders feel responsible for the outcomes of others. The study of Galinsky and colleague's (2014) signified that power holders primed with perspective taking and accountability made better and more justified choices. The findings in this study support the prediction that a power holder is socially alert and therefore can take perspective, feel accountable, and responsible for other outcomes. Another explanation can be that students of the University of Leiden are socially aware of their positions due to the fact that their life is largely concerned with social orientation and therefore they consider their 'friends' perspective and feel social coherence with them. Unfortunately, relations between these 'positive' effects were not found. In theory (Galinsky et al., 2014), positive correlations could be considered as an expected result.

Further research can provide support for these relations. In contrast, relations were also not

found with main effects of power. Positive effects do not occur together with negative

effects. This can be explained that people differ in their perception of power. People tend to

use power for themselves; others tend to use power for others.

      Emotions. As expected, when being in a powerful position, the BAS system is

activated. In line with the study of Keltner and colleagues (2003) people report that they feel

good or happy when they are powerful. These results can also be considered as positive

effects of power.

      Furthermore, power holders feel angry, but this occurred only in a minor part of the

essays. Alternatively, power holders feel envious towards others. These envious feelings are

strongly related with 'distrust'. This relation was predicted previously to this research. Power

holders might feel threatened by others in their status or in their rewards, and therefore

distrust others and have envious feelings towards others. Feeling envious is also related to

controlling the outcomes of others, controlling your own outcomes, and egoistic behaviour.

Power holders tend to put their own interest before others, by controlling their own outcome

and those of others. These actions are supported by envious feelings. In other words, power

holders tend to show greedy behaviour.

      Power holders can feel guilty about their actions. Guilt is not related to any other

variable, guilt is felt because power holders might conclude, in a retrospective view, that their

actions are not in line with their personal idea about their social behaviour (Galinsky et al.,

2014). Furthermore, guilt could arise as part of feeling accountable for your action, but again,

a relation is not found.

      Some power holders have moderate feelings of pride after achieving a goal. Pride is a

positive emotion and in theory is related to happiness (in this research this relation is not

found). These feelings of pride are strongly related with legitimacy. Consequently, when

respondents think they have the right to act a certain way they may feel proud about this role.

Furthermore, pride rules out feelings of anxiety. This seems logical, because feeling

proud is an opposite emotion of anxiety. In addition, anxiety is also related negatively to self-

affirmation. Probably self-affirmation is linked to positive emotions, but these relations are

not found.

External attribution. An unexpected finding was that power holders attributed their

actions, decisions or thoughts to the position they are in as opposed to attributing them to

themselves personally. In other words, powerful individuals tend to explain themselves and

their actions by pointing to their power or a task that was influencing them to act. For

example, individuals who were babysitting punished children simply because they were in

charge of them. Another example is that chairmen of student organisations think they have to

make decision just because they fulfil the role of chairman. External attribution can be

explained by the fact that power holders realise they do not have sufficient experience or

competence (Fast & Chen, 2007) to fulfil their task or position in a satisfactory manner.

Therefore they grab the most 'powerful argument' and make themselves and others believe

that they are in a powerful position because they are competent. This seems similar to the

variables 'legitimacy' and 'self-affirmation'. Unfortunately a relation is not found between

these variables.

Weaknesses and limitations. During the rating process, in cases where variables are

not reported they are rated as a missing value. When calculating the internal consistency, t-

values, and correlations, some statics are based on a calculation of less than 137 participants.

Some are even based on less than 10 participants. As can been seen in table 5.1 and 5.2, some

correlations are not calculated due to the fact that one of the variables is a constant. This

means that some of the conclusions that are made are not based on the entire sample.

Furthermore, general information about the sample is missing. Therefore, it is not possible to draw any conclusions regarding sex or age. Notwithstanding, it is clear that all of the participants are students of Leiden University, meaning they are, young and highly educated. However, if there had been a clear description of the sample a better generalization could have been made.

In retrospective, besides rating for 'perspective taking' it would have been wise to also rate for 'non perspective taking', because in that case a stronger statement could have been made about 'non perspective taking' occurring in normal life.

Implications. This research implies that the main effects of power occur in normal life. Moreover, power holders take the perspective of others, feel accountable for their actions and feel responsible for others, regardless of their own position of power. Furthermore, power holders have anxious and guilty feelings, probably due to personal sensitivity or incompetence. Moreover, they have envious feelings towards others and show greedy behaviour. Finally, power holders tend attribute their actions to their position of their power externally, which possible stems from their ideas of legitimacy or their incompetence.

These results provide a good view of the various definitions of power and demonstrate the way people experience and perceive power. Furthermore it provides examples of power situations occurring in normal life.

Recommendations. A recommendation for further research on this topic would be to compare the essays of people in a powerless position to power holders. This can give a broader view of effects of power on subordinates. Furthermore, additional research on the motivation of external attribution can be done. It seems very interesting to find out why power holders act this way.

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Appendix

Definitions of Variables searched for in Essays

Variable	Definition
Essay indication	Name of researcher + essay number + Initials student.
Powerful or Powerless condition	Does someone have power or not, based on the introduction of the essay.
Situation	In what situation someone is powerful.
Egoistic or Social Behaviour	Places own interests or that of one's job-position above the interests of another.
Rating egoistic behaviour	Degree in which one is concerned about oneself.
Perspective taking or no Perspective taking	Whether or not the power holder explains another's perspective, or describes another's situation.
Rating Perspective taking	Degree in which one takes perspective of the other/his situation
Disinhibited behaviour	Whether someone takes action (from their power position).
Rating Disinhibited behaviour	Degree in which one takes action.
Distrust or no distrust	Whether or not the power holder shows distrust toward another person.
Rating Distrust	Degree in which one distrusts another person.
Control or no control others	Whether or not one feels they have control over others/other people's outcomes.
Rating Controllability others	Degree in which one feels they have control over others/other people's outcomes.
Control or no control Self	Whether or not one feels they have control over their own outcomes/situations.
Rating Controllability self	Degree in which one feels they have control over their own outcomes.
Responsibility or no responsibility	Whether or not one feels responsible for other people's outcomes.
Rating Responsibility	Degree in which one feels responsible for other people's outcomes.
Responsibility Self	Whether or not one feels responsible for their own outcomes.
Rating Responsibility Self	Degree in which one feels responsible for one's own outcomes.
Accountable or not accountable	Whether or not one is in some way required to explain actions or decision to someone.
Rating Accountability	Degree in which one is required to explain actions or decisions to someone.
Legitimacy or no Legitimacy	Whether or not one feels they have the right to their actions or decisions.
Rating Legitimacy	Degree in which one feels they have the right to their actions or decisions.
Self-affirmation or no self-affirmation	Whether or not one explains away their own actions or decisions.
Rating self-affirmation	Degree in which one explains away their own actions or decisions.

Happiness or happiness	Whether or not one feels pleasure or contentment.
Rating happiness	Degree in which one feels pleasure or contentment.
Anxiety or no anxiety	Whether or not one feels distressed.
Rating anxiety	Degree in which one feels distressed.
Anger or no anger	Whether or not one feels strong annoyance, displeasure, or hostility.
Rating anger	Degree in which one feels strong annoyance, displeasure, or hostility.
Envy or no envy	Whether or not one feels resentful toward another.
Rating envy	Degree in which one feels resentful toward another.
Sadness or no sadness	Whether or not one feels unhappy.
Rating Sadness	Degree in which one feels unhappy.
Guilt	Whether or not one feels they have done wrong or failed.
Rating Guilt	Degree in which one feels they have done wrong or failed.
Pride	Whether or not one experiences pleasure or satisfaction from own actions, decisions or achievements.
Rating Pride	Degree in which one feels pleasure or satisfactions for own actions, decisions or achievements.
External Attribution	Whether or not one attributes their behaviour to others, a situation, or their power-position.
Rating External Attribution	Degree in which one attributes their behaviour to others, a situation, or their power-position.