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Guiding others for their own good: Action orientation is associated with prosocial enactment of the implicit power motive

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Abstract Prior research has repeatedly documented how people who are implicitly motivated by power motives may hurt other people's interests. However, people may also enact the implicit power motive (*n*Power) in a prosocial manner. Using an Operant Motive Test, the authors differentiated five enactment strategies within *n*Power and investigated personality antecedents and personal benefits of a prosocial enactment strategy. Two studies found that demand-related action orientation (i.e., ability to self-regulate positive affect) was associated with prosocial enactment of *n*Power. Furthermore, prosocial enactment of *n*Power was associated with a higher explicit power motive among future teachers (Study 1) and future psychologists (Study 2). Finally, there was an indirect effect of action orientation through the prosocial enactment of *n*Power on the explicit power motive (Studies 1 and 2) and, in turn, on well-being (Study 2). Our integration of motivation and self-regulation research (the "what" and "how" of goal striving) helps to better understand the dual nature of power motives.

Keywords Prosocial guidance · Operant Motive Test (OMT) · Action orientation · Motive enactment strategies · Self-regulation · Intrinsic motivation · Leadership motivation · PSI theory

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"Power tends to corrupt, and absolute power corrupts absolutely" (1949, p. 364). This famous remark by the English historian, politician, and writer John E. E. Dahlberg-Acton (Lord Acton) is frequently cited throughout society. It points to a dark side of power that is consistent with many findings in psychology: Power often aims at status and superiority (McClelland 1970, 1975; Winter 1973) and has been associated with antisocial decision-making (Magee and Langner 2008), dehumanization of others (Lammers and Stapel 2011), infidelity (Lammers et al. 2011), and aggressive behaviors (Mason and Blankenship 1987; Zurbriggen 2000). Group leaders with a high implicit power motive inhibit information flow into group discussions (Fodor and Smith 1982) and reduce feelings of competence in group members (Fodor and Riordin 1995; for an overview see Fodor 2010). In light of such findings, it is not astonishing that the power motive has acquired a bad reputation.

However, there is also a benevolent, prosocial side to power that has not received equal attention. From the beginning of implicit motive assessment, McClelland (1970, 1975) and Winter (1973) emphasized the dual nature of power: People realize their implicit power motive in either an antisocial or a prosocial direction. The latter aims at guiding and supporting others (McAdams 1985) and has been associated with prosocial decision-making (Magee and Langner 2008), helping behavior (Aydinli et al. 2014), generativity (Hofer et al. 2008), and love for children (Chasiotis et al. 2006). These findings teach us that it is not sufficient to know *what* a person is striving for (i.e., having impact on others, in case of the power motive). In addition, we have to assess *how* a person is striving to meet his/her desire for impact (i.e., in a prosocial manner or not) in order to learn about factors that are associated with a prosocial enactment of the implicit power motive.

In the present studies, we examined five *enactment strategies* that Kuhl and Scheffer (1999) differentiate within the implicit power motive—one of which is prosocial and in the focus of our studies. We tested whether high self-regulatory ability (i.e., action orientation) is associated with prosocial enactment among future teachers (Study 1) and future psychologists (Study 2). In addition, we explored personal benefits of a prosocial enactment by looking at the relationships with the explicit power motive and well-being (see Fig. 1). According to career counseling (Hossiep and Paschen 2003, 2008), a high explicit power motive is a crucial qualification for teachers and associated with well-being. Furthermore, a positive correlation of implicit and explicit power motives would indicate that they work healthily in concert (Baumann et al. 2005).

Prosocial enactment of the implicit power motive

Implicit motives are unconscious needs that orient people's attention and behavior towards specific classes of incentives and are assessed with projective tests that are easily imbued with unconscious affective processes (McClelland et al. 1989). In the Operant Motive Test (OMT; Kuhl and Scheffer 1999), the assessment of implicit motive content (i.e., the need for power, achievement, and affiliation) is extended by a systematic assessment of five enactment strategies for each motive (see Fig. 2 for power). In addition to the classical distinction between approach (hope for power) and avoidance (fear of powerlessness), the approach strategies are further differentiated on the basis of crossing two affective sources of motivation (positive vs. negative affect) with self-regulated versus incentive-focused forms of motivation (Baumann et al. 2010; Kuhl and Scheffer 1999; Kuhl et al. 2003; Scheffer 2005).

For the implicit need for power (*n*Power), the 2 × 2 scheme yields the following approach strategies. First, the self-regulated strategy driven by positive affect is oriented toward *prosocial guidance* of others and is associated with intrinsic motivation and intuitive knowledge of one's own and other's motivational states and needs as well as corresponding behavior in vertical relationships (*n*Power1). Second, the incentive-focused strategy driven by positive affect is oriented at being the focus of attention and having *status*, prestige, and authority (*n*Power2). Third, the self-regulated strategy driven by negative affect is oriented toward *coping* with power-related threat, self-assertion, expressing own feelings and wishes, and making decisions (*n*Power3). Fourth, an incentive-focused strategy driven by negative affect is oriented toward demonstrating *dominance* and superiority but can also be indicated by *inhibition*, insecurity, and reluctance to use one's given power (*n*Power4). Finally, as mentioned above, the OMT consists of a classical (passive) avoidance strategy concerned with the explicit fear of *powerlessness* (*n*Power5). For examples of coding contents see Fig. 2.

Several findings speak for the validity of *n*Power1. For example, Aydinli et al. (2014) showed that self-reported prosocial motivation was only predictive of spontaneous helping behavior when *n*Power1 was high. Hofer et al. (2008) explored the role of *n*Power1 for generativity—a concern that is directed towards a high investment in the next generation (Erikson 1963). Across samples in Cameroon, Costa Rica, and Germany, Hofer et al. (2008) found *n*Power1 to serve dispositional generative concerns which, in turn, were linked to more explicit generative goals in ideographic goal listings as well as higher life satisfaction. The findings support the assumption that there is a positive side to power and that its prosocial enactment supports corresponding explicit strivings as well as personal life satisfaction.

Whereas implicit motives are conceived as stable dispositions that are developed through early (preverbal) socialization experiences and relatively stable across the

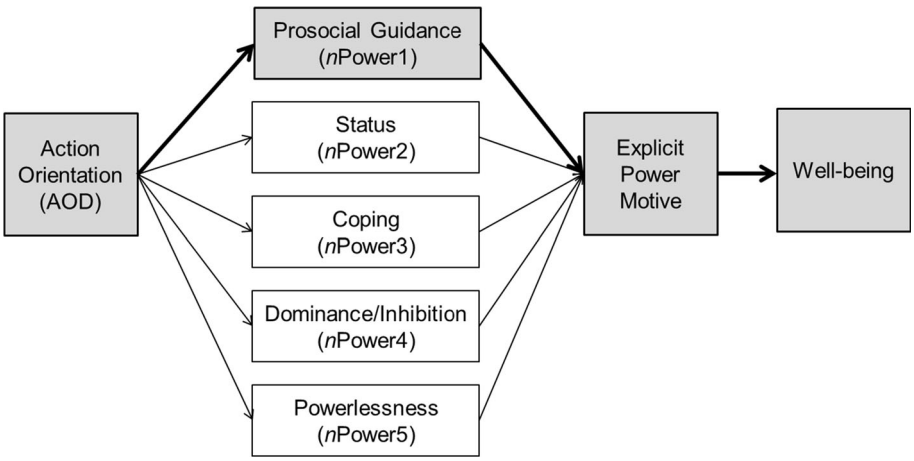

Fig. 1 Conceptual model with an indirect effect from demand-related action orientation (AOD) through a prosocial enactment of the implicit power motive (*n*Power1) to the explicit power motive (Studies 1 and 2) and, in turn, well-being (Study 2)

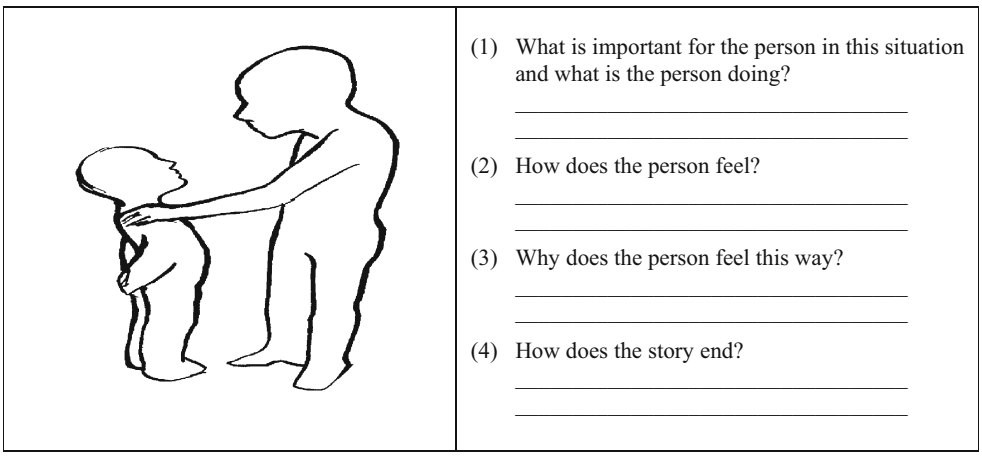

Fig. 2 Example picture, contents, and codings in the (OMT; Kuhl and Scheffer 1999). Prosocial guidance (*n*Power1): (*1*) it is important to encourage the other person in her success. (*2*) She feels good. (*3*) She is pleased that her method of learning has yielded positive results. (*4*) The student is very successful. Status (*n*Power2): (*1*) She is underlining her authority and making clear who is to play which part. (*2*) She feels great. (*3*) The person feels she has been confirmed as she acted in accordance with her role/position. (*4*) Both are going home. Coping (*n*Power3): (*1*) She wants to convince the other person that what she has to say is important. (*2*) She is angry. (*3*) Because the other person doesn't believe her. (*4*) Eventually, she gets her way. Dominance/inhibition (*n*Power4): (*1*) She does not want to intimidate the other person too much. (*2*) Relieved. (*3*) She is happy because the situation now is agreeable and she has been fair. (*4*) They start working together again. Powerlessness (*n*Power5): (*1*) It is important to straighten up! Be self-confident and get a clear picture of what is happening. (*2*) Small and helpless. (*3*) The other person is much too domineering and frightening. (*4*) She is punished by having to do extra work

lifespan (McClelland et al. 1989), the enactment strategy of a given motive may vary considerably across contexts (Kuhl and Scheffer 1999; Scheffer 2005). Prosocial guidance is conceived as an *intrinsic* enactment strategy (similar to flow in achievement and intimacy in affiliation motives). And although most people at some point experience helping as rewarding in itself, a continued interest in and satisfaction with prosocial guidance does not arise automatically out of the activity but results from mainly unconscious workings of self-regulatory functions (Baumann et al. 2010; Kaschel and Kuhl 2004; Kuhl and Koole 2008; Kuhl and Scheffer 1999). Stated differently, it takes self-regulatory abilities (i.e., action orientation) to enact the implicit power motive in a prosocial way.

Action orientation and prosocial enactment of power

Action orientation describes individual differences in the ability to self-regulate affect (Kuhl 1994). Demand-related action orientation (AOD) is the ability to self-generate positive affect, to overcome hesitation and procrastination, and to initiate the implementation of self-congruent goals—especially in the face of high demands and difficulties (Baumann et al. 2005; Koole and Jostmann 2004; Koole et al. 2012; Kuhl 2000, 2001; Kuhl and Beckmann 1994). It has been found to be prevalent among managers (Gröpel 2008) and to be associated with positive work engagement (Diefendorff et al. 2000; Wojdylo et al. 2014) as well as a flexible adaptation to situational demands (Koole and Jostmann 2004; Koole et al. 2012). Thus, demand-related action orientation is presumed to be associated with an intrinsic, prosocial enactment of implicit power motives among students of social professions and was in the focus of the present studies.[1]

Several findings indicate that self-regulation and intrinsic motive enactment go hand in hand. For example, people high in self-regulation (as indicated by mastery orientation and volitional facilitation in the Stroop task) enact the achievement motive in an intrinsic way and create opportunities for flow and curiosity (Baumann and Scheffer 2010, 2011). Similarly, action orientation (as well as an internal locus of control) is associated with experiences of flow (Baumann et al. 2015; Keller and Bless 2008; Keller and Blomann 2008). Finally, action orientation is associated with an intrinsic enactment of the affiliation motive and the creation of options for intimacy and love (Hofer and Busch 2011). To our knowledge, the relationship between action orientation and an intrinsic enactment of the power motive has not been investigated so far.

[1] Threat-related action orientation (AOT) is the ability to self-regulate negative affect once it is aroused and to disengage from uncontrollable rumination—especially in the face of threats. This ability is presumed to be more relevant for creative coping with power-related threats than for the prosocial enactment of power motives and was not considered in the present studies.

In an extensive literature review, Keltner et al. (2003) propose that power is associated with positive affect and thereby activates approach-related behavioral tendencies. Kuhl and Scheffer (1999) take a more differentiated view by separating between behavioral tendencies and underlying affective sources of motivation. Whereas prosocial guidance (*n*Power1) and status (*n*Power2) fit well into the pattern proposed by Keltner et al. (2003), coping (*n*Power3) and dominance (*n*Power4) indicate avoidance-motivated approach tendencies that do not conform to the proposed pattern. Despite this and several other differences (e.g., reliance on proxies of power such as minority/majority status vs. assessment of implicit power motives), the work is informative because Keltner et al. (2003, p. 279) propose that "[…] individuals who are predisposed to approach-related behavior will especially conform to the pattern of power-related affect, cognition, and behavior on gaining power". Given that demand-related action orientation is the approach-related facet of action orientation (i.e., initiative and self-generation of positive affect), we expect it to be associated with a truly approach-motivated enactment of power: prosocial guidance (*n*Power1).

Action orientation and motive congruence

Most of the previous work on action orientation and motives has focused on the congruence of implicit and explicit (self-attributed) motives. Although implicit and explicit motives operate independently and correlate only weakly (Köllner and Schultheiss 2014; McClelland et al. 1989) their coalition has been found to contribute to well-being and health (Brunstein et al. 1998; Hofer et al. 2006; Thrash et al. 2010). Incongruence between implicit and explicit motives, in contrast, has been characterized as ''striving for goals without gaining pleasure from doing so'' or ''a lack of striving for goals which would give rise to positive affect'' (Langens and McClelland 1997; cf. Kazén and Kuhl 2011) and found to impinge on well-being and health as a hidden stressor across the social motives of affiliation (Schüler et al. 2009), achievement (Baumann et al. 2005), and power (Hofer et al. 2010).

Baumann et al. (2005) found that people high in action orientation are better able to attune the explicit achievement motive to the implicit achievement motive. Furthermore, motive-congruence mediated the relationship between action orientation and greater well-being. However, these findings were restricted to the achievement domain. To our knowledge, it has not been tested whether action orientation is also associated with congruence in power motives. This is highly important because the power motive is especially relevant for people who work in power-related professions such as teachers, managers, politicians, and psychologists (Winter 1973). Consistent with this reasoning, among teachers and managers, congruently high power motives but not affiliation and achievement motives have been found to be associated with well-being (Gröpel 2008; Kazén and Kuhl 2011; Wagner et al. 2015).

We assume that action orientation is associated with motivational functioning in the power domain as well—albeit in a context-specific manner. Among teachers and psychologists, the five ways to enact the implicit power motive are not equally adaptive and compatible with the demands of the job. Because action-oriented individuals regulate emotions and motivation in a highly context-sensitive manner (cf. Koole and Jostmann 2004), we expected an action orientation in future teachers and psychologists to be associated with prosocial enactment of the implicit power motive and, indirectly, an attunement of the explicit power motive and well-being. To summarize, we tested the following hypotheses: (*H*1) action orientation is associated with prosocial enactment of the implicit power motive (*n*Power1), (*H*2) *n*Power1 is correlated with the explicit power motive, and (*H*3) action orientation has an indirect effect through *n*Power1 on the explicit power motive and, in turn, well-being (see Fig. 1).

Study 1

In the first study, we tested our hypotheses among students aspiring to become teachers. We focused on students because neither action orientation nor power motives start to evolve with entering a profession, but are personality dispositions people bring with them. We measured the explicit power motive in terms of *leadership motivation* with an instrument used in career counseling (Hossiep and Paschen 2003, 2008). It is conceived of as a trait-like disposition so the term "motive" instead of "motivation" (i.e., a current, state-like activation of a motive) is more appropriate.

Participants

One hundred and ninety-one undergraduates studying to become teachers (140 female) from the University of Trier, Germany, voluntarily participated in the study and received an individual counseling on personal development opportunities for their later profession. Their mean age was 20.48 years (range 18–33 years).

Materials

Action orientation

The Action Control Scale (ACS; Kuhl 1994) was used to assess demand-related action orientation (AOD). The AOD

scale of the ACS consists of 12 items (Cronbach's $\alpha = .78$). An example item is "When I am facing a big project that has to be done: (a) I often spend too long thinking about where I should begin, or (b) I don't have any problems getting started." with option "a" reflecting the state-oriented (hesitant) and option "b" the action-oriented (initiative) response alternatives. All action-oriented response alternatives were summed up so that the scale ranged from 0 to 12, with lower scores indicating state action orientation (i.e., low action orientation) and higher scores indicating higher action orientation (for further information see Diefendorff et al. 2000).

Implicit power motive

The (OMT; Kuhl and Scheffer 1999) was used (see Fig. 2). It consists of 15 pictures. Participants are asked to choose a main protagonist, invent a story around this person, and write down their spontaneous associations to four questions. The OMT coding procedure starts by checking whether one of the three motive contents (affiliation, achievement, power) is present or not (cf. Winter 1994). If no motive theme is apparent, a "zero" is coded. If a motive is present, one of the 15 cells (3 motive contents x 5 enactment strategies) is coded per picture. Thus, no correction for length of protocol is necessary. For coding examples of the power motive, see Fig. 2. A first step is to check whether approach (*n*Power1–4) or avoidance behavior is present (*n*Power5). The latter is only coded when the protagonist consciously experiences negative affect and is passively fixated on it without any active or creative coping attempt. If an approach tendency is apparent, the second step is to code whether it is driven by positive affect (*n*Power1–2) or negative affect (*n*Power3–4). The final step is to code whether more self-regulation processes (*n*Power1 and 3) or more external triggers and incentives (*n*Power2 and 4) are involved. Indicators of self-regulation include feeling satisfied with own actions (self-positivity), having access to multiple and creative action alternatives (overview over extended network structures), and perceiving and down-regulating negative affect (integrative capacity) (Kuhl 2001; Kuhl and Koole 2008).

The affective sources of motivation do not have to be consciously experienced by the protagonist or explicitly reported in the OMT stories. For example, the effects of latent negative affect without self-regulation (*n*Power4) can be inferred from rather tight, rigid, and uncreative forms of behavior (e.g., dominant implementations of power needs according to an "all-or-nothing-principle" rather than responsible and socially integrative forms of power). In contrast, if participants explicitly mention negative affect in conjunction with a creative search for solutions, a self-regulated enactment (*n*Power3) is coded (e.g., active and creative coping with power-related threats). Thus, negative affect is not always associated with passive avoidance (*n*Power5) but may motivate creative (*n*Power3) or active and rigid (*n*Power4) approach behavior. Similarly, positive affective sources of motivation are coded as self-regulated (*n*Power1) if needs are implemented in a creative, integrative, and flexible manner that seems to flow out of the activity itself (e.g., prosocial and socially integrative influences on others) and, thus, indicate unconscious workings of self-regulatory functions (Baumann et al. 2010; Kaschel and Kuhl 2004; Kuhl and Koole 2008). In contrast, positive affect is not coded as self-regulated when stories make explicit reference to power-related incentives such as being the focus of attention and having status (*n*Power2).[2]

Extensive research on the OMT is reported in Kuhl (2001; see also Baumann et al. 2010; Kuhl et al. 2003; Scheffer 2005; Scheffer et al. 2003). Scoring for power motives was done by an experienced coder who had achieved agreements of 85 % or better in responses to training material prescored by experts. In addition, coding difficulties were resolved by discussion in regular expert meetings. For each of the five enactment strategies of the implicit power motive, the sum was computed. Furthermore, we calculated the sum across all five enactment strategies as a measure of the strength of the implicit power motive (*n*Power). Finally, we calculated a relative prosocial enactment score (*n*Power1/*n*Power) in order to test whether the effects are driven by a specific enactment strategy rather than the strength of the power motive per se.

Explicit power motive

The leadership motivation scale from the Business-focused Inventory of Personality (BIP; in German: Bochumer Inventar zur berufsbezogenen Persönlichkeitsbeschreibung; Hossiep and Paschen 2003, 2008) was used. It measures leadership motivation as a trait (i.e., leadership motive) and consists of twelve items (Cronbach's $\alpha = .75$) to be rated on a 6-point scale (1 = "not at all"; 6 = "absolutely"). An example item is: "I like to take responsibility for important decisions".

[2] In a revised version of the OMT (Kuhl and Scheffer 2012), an autonomy motive (*n*Autonomy) is coded in addition to power, affiliation, and achievement motives. It is concerned with power over oneself rather than over others and feeling free from the influence of others (Alsleben 2008; see also Schüler et al. 2014). When coding autonomy, the contents of some power enactment strategies slightly change. "Status", for example, is coded as *n*Autonomy2 rather than *n*Power2. "Prosocial guidance" (*n*Power1), in contrast, is unaffected by the additional coding of an autonomy motive.

Procedure

Via a distribution list provided by the University of Trier, all students aspiring to become teachers were invited to take part in a large-scale online assessment and invited to a subsequent counseling on their personality-profession fit. The assessment contained the measures described above. After finishing the online assessments, students were offered feedback and further counseling on their strengths and developmental potentials for their future profession as a teacher.

Results

Descriptives and correlations

Table 1 (upper right) gives an overview of the descriptive results and correlations among our study variables. Consistent with *H*1, AOD was correlated with a prosocial enactment of the implicit power motive (*n*Power1). Furthermore, AOD was correlated with the explicit power motive. Consistent with *H*2, prosocial guidance (*n*Power1) was correlated with the explicit power motive. Finally, prosocial guidance (*n*Power1) was negatively correlated with fear of powerlessness (*n*Power5).

Direct and indirect effects on the explicit power motive

To test whether AOD had an indirect effect through prosocial guidance (*n*Power1)—but not the other enactment strategies (*n*Power2–5)—on the explicit power motive, we conducted a mediation analysis with 5000 bootstrap resamples using the SPSS macro Model 4 described by Hayes (2012, 2014). Using this procedure, we computed a point estimate and a 95 % confidence interval for the mediation effect.

In the model using enactment strategies of the implicit power motive as dependent variables (see left columns of Table 2), AOD was significantly associated with *n*Power1, $R^2 = .04$, $F(1, 189) = 8.41$, $p = .00$, but not with any other enactment strategies, Fs $< .50$, *ns*. In the model using the explicit power motive as a dependent variable (see upper left columns of Table 3), there were significant direct effects of AOD and *n*Power1 on the explicit power motive indicating that higher demand-related action orientation and higher prosocial enactment of the implicit power motive were associated with a higher explicit power motive. In contrast, the other enactment strategies (*n*Power2–5) were not associated with the explicit power motive.

The significance of the indirect effect of AOD through *n*Power1 on the explicit power motive was verified with bootstrapped errors and 95 % confidence intervals (CIs). Consistent with *H*3, the indirect effect of AOD on the explicit power motive through *n*Power1 was significant because the limits of the 95 % confidence interval did not include zero (see lower left columns of Table 3). AOD did not have a significant indirect effect on the explicit power motive through any other enactment strategies of the implicit power motive (*n*Power2–5). Altogether, the model accounted for approximately 12 % of variance in the explicit power motive, $R^2 = .12$, $F(6, 184) = 3.99$, $p < .001$.

To rule out that the effects were driven by the strength of the power motive rather than its prosocial enactment, we repeated the analysis with a relative prosocial enactment score (*n*Power1/*n*Power). For five participants with a denominator of zero, relative *n*Power1 scores were set to zero. Results were the same when excluding these participants from the analysis. First, AOD was significantly associated with relative *n*Power1, $B = .20$, $SE = 0.07$, $t(189) = 2.83$, $p = .01$. Second, there were significant direct effects of AOD, $B = .20$, $SE = 0.07$, $t(189) = 2.83$, $p = .01$, and relative *n*Power1, $B = .20$, $SE = 0.07$, $t(189) = 2.83$, $p = .01$, on the explicit power motive. Finally, there was a significant indirect effect of AOD through relative *n*Power1 on the explicit power motive, $b = .03$, $SE = 0.018$, $CI = .007$ to $.080$.

Discussion

Study 1 was designed to test the relationships between action orientation, a prosocial enactment of the implicit power motive, and the explicit power motive among students aspiring to become teachers. The results of Study 1 support the assumed indirect effect of action orientation. In addition to a direct effect, action orientation was also conducive to the leadership motive through the intrinsic, prosocial enactment of the implicit power motive—but not through strategies oriented toward status, coping, dominance/inhibition, and fear of powerlessness. The finding provides the first empirical support for the theoretical assumption that an intrinsic (prosocial) enactment of the implicit power motive is fueled by self-regulatory functions (cf. Baumann et al. 2010; Kaschel and Kuhl 2004; Kuhl and Koole 2008; Kuhl and Scheffer 1999) and extends related findings for achievement (Baumann and Scheffer 2010, 2011) and affiliation (Hofer and Busch 2011).

Study 2

In Study 2, we aimed at extending our findings in several ways. First, to show that our findings are not confined to future teachers but generalize to other professions, we tested students aspiring to become psychologists. Second,

Table 1 Bivariate correlations (Spearman), means, and standard deviations in Study 1 (N = 191; upper right) and Study 2 (N = 233; lower left)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	*M*	*SD*
(1) Action orientation (AOD)		.21**	.05	.01	.00	−.03	.13	.23**		7.43	3.09
(2) Prosocial guidance (*n*Power1)	.15*		−.11	.04	.05	−.20**	.48***	.15*		1.41	1.28
(3) Status (*n*Power2)	−.04	.04		−.06	.02	.03	.39***	.10		1.42	0.99
(4) Coping (*n*Power3)	.12	−.11	−.28***		−.24**	.03	.18***	.01		0.66	0.80
(5) Dominance/inhibition (*n*Power4)	−.02	.04	−.03	−.18**		−.45**	.51***	−.17*		2.90	1.81
(6) Powerlessness (*n*Power5)	−.06	−.11	−.08	−.15*	−.53***		.12	.11		1.72	1.27
(7) Implicit power motive (*n*Power)	.08	.39***	.28***	.28***	.37***	.10		.06		8.10	2.22
(8) Explicit power motive	.13*	.15*	−.12	−.01	−.05	.12	.06			3.81	0.61
(9) Well-being	.37***	.06	−.14*	.10	.08	−.02	.08	.17**			
M	5.80	0.90	1.43	1.71	2.81	2.09	8.94	2.46	3.83		
SD	3.25	0.89	1.00	1.37	1.65	1.43	1.76	0.46	0.93		

* $p < .05$; ** $p < .01$; *** $p < .001$

Table 2 Direct effects of demand-related action orientation (AOD) on the five enactment strategies of the implicit power motive

	Study 1				Study 2			
	B	*SE*	*t*	*p*	*B*	*SE*	*t*	*p*
Prosocial guidance (*n*Power1)								
Constant	.00	0.07	0.00		.00	0.07	−0.02	
AOD	.21	0.07	2.90	.00	.15	0.07	2.23	.03
Status (*n*Power2)								
Constant	.00	0.07	0.00		.00	0.07	0.01	
AOD	.05	0.07	0.70	.48	−.04	0.07	−0.60	.55
Coping (*n*Power3)								
Constant	.00	0.07	0.00		.00	0.07	−0.02	
AOD	.01	0.07	0.18	.85	.12	0.07	1.84	.07
Dominance/inhibition (*n*Power4)								
Constant	.00	0.07	0.00		.00	0.07	0.00	
AOD	.00	0.07	−0.02	.98	−.02	0.07	−0.32	.75
Powerlessness (*n*Power5)								
Constant	.00	0.07	0.00		.00	0.07	0.01	
AOD	−.03	0.07	−0.42	.68	−.06	0.07	−0.90	.37

to show that our findings are not restricted to the measure of leadership motive, we assessed the explicit power motive with an instrument more common in motivation research and motivational counseling (Kaschel and Kuhl 2004; Kuhl and Henseler 2004). Finally, empirical findings show that implicit support of explicit power strivings is conducive to well-being (Hofer et al. 2008, 2010; Gröpel 2008; Kazén and Kuhl 2011; Wagner et al. 2015) and the conceptualization of prosocial guidance perfectly matches the presumed job demands of teachers and psychologists (Hofer et al. 2008; Kuhl and Scheffer 1999; McClelland 1975; Winter 1973). Therefore, we included a measure of well-being to test whether the indirect path from action orientation through prosocial guidance on the explicit power motive is associated with well-being.

Participants

Two hundred and thirty-three psychology undergraduates (178 women) from the University of Trier, Germany, voluntarily participated in an online survey that included the measures described below. In return for their participation, participants received course credits. The mean age of the participants was 22.63 years (range 18–33 years).

Materials and procedure

As in Study 1, we used the Action Control Scale (ACS; Kuhl 1994) to assess demand-related action orientation (AOD; Cronbach's $\alpha = .80$) and the Operant Motive Test (OMT; Kuhl and Scheffer 1999) to assess the implicit power motive and its enactment. The online assessment started with the OMT, followed by questionnaires, and ended with demographic variables.

Explicit power motive

We used the Motive Enactment Test (MET; Kuhl and Henseler 2004) to assess the strength and integrative enactment of the explicit power motive.[3] The 7 items (Cronbach's $\alpha = .72$) were rated on a 4-point scale (1 = "not at all"; 4 = "completely"). Example items are: "Other people often prefer me to be the leader" and "I feel that most of the time I can speak my mind".

[3] The MET consists of a fourth explicit power motive item ("In my daydreams I often play the hero") that was not included in the present study because it has little content overlap with self-determined, integrative power and did not show significant item-inter-correlations in previous studies.

Table 3 Direct effects of demand-related action orientation and indirect effects through the five enactment strategies of the implicit power motive on the explicit power motive

	Study 1: Leadership motive				Study 2: Explicit power motive			
	B	*SE*	*t*	*p*	*B*	*SE*	*t*	*p*
Constant	.00	0.07	0.00		.00	0.06	0.00	
Action orientation (AOD)	.20	0.07	2.83	.01	.11	0.07	1.75	.08
Prosocial G. (*n*Power1)	.15	0.07	2.00	.05	.15	0.07	2.23	.03
Status (*n*Power2)	.11	0.07	1.54	.13	−.11	0.07	−1.55	.12
Coping (*n*Power3)	−.03	0.07	−0.43	.67	−.01	0.07	−0.09	.93
Dominance/Inh. (*n*Power4)	−.15	0.07	−1.93	.06	.14	0.08	0.23	.82
Powerlessness (*n*Power5)	.08	0.08	0.95	.34	.08	0.08	1.75	.08

Indirect effect of AOD on the explicit power motive through	*b*	*SE*	*Boot LLCI*	*Boot ULCI*	*b*	*SE*	*Boot LLCI*	*Boot ULCI*
Prosocial G. (*n*Power1)	.03	0.02	.002	.081	.02	0.01	.002	.060
Status (*n*Power2)	.01	0.01	−.006	.039	.00	0.01	−.004	.030
Coping (*n*Power3)	.00	0.01	−.020	.008	.00	0.01	−.027	.015
Dominance/Inh. (*n*Power4)	.00	0.01	−.023	.034	−.00	0.01	−.016	.009
Powerlessness (*n*Power5)	.00	0.01	−.040	.007	−.01	0.01	−.046	.005

LLCI (ULCI) lower (upper) limit of confidence interval

Well-being

The WHO-Five Well-Being Index (World Health Organization 1998) was applied to measure subjective well-being. It consists of five items (Cronbach's $\alpha = .81$) to be rated on a 6-point scale (1 = "at no time"; 6 = "all of the time"). Example items are: *During the last 2 weeks …* "I have felt cheerful and in good spirits" and "… I have felt active and vigorous".

Results

Descriptives and correlations

Table 1 (lower left) gives an overview of the descriptive results and correlations among our study variables. Consistent with *H*1, AOD was positively correlated with the prosocial enactment of the implicit power motive (*n*Power1). Furthermore, AOD was positively correlated with the explicit power motive and well-being. Consistent with *H*2, prosocial guidance (*n*Power1) was positively correlated with the explicit power motive. Finally, the status-oriented enactment of the implicit power motive (*n*Power2) was negatively correlated with well-being and the explicit power motive was positively correlated with well-being.

Direct and indirect effects on the explicit power motive

As in Study 1, we conducted a mediation analysis (Model 4; Hayes 2012, 2014) to test whether AOD had an indirect effect on the explicit power motive through a prosocial enactment of the implicit power motive (*n*Power1)—but not any other enactment strategy (*n*Power2–5).

In the model using the enactment strategies of the implicit power motive as dependent variables (see right columns of Table 2), AOD was significantly associated with *n*Power1, $R^2 = .02$, $F(1, 231) = 4.99$, $p = .03$, but not with any other enactment strategy (*n*Power2–5), $Fs < 3.40$, $ps > .065$. In the model using the explicit power motive as a dependent variable (see upper right columns of Table 3), *n*Power1 had a significant direct effect on the explicit power motive indicating that a higher prosocial enactment was associated with a higher explicit power motive. The other enactment strategies of the implicit power motive (*n*Power2–5), in contrast, were not associated with the explicit power motive.

The significance of the indirect effect of AOD through *n*Power1 on the explicit power motive was verified with bootstrapped errors and 95 % confidence intervals (CIs). Consistent with expectations, the indirect effect of AOD on the explicit power motive through prosocial guidance (*n*Power1) was significant because the limits of the 95 % confidence interval did not include zero (see lower right columns of Table 3). AOD did not have an indirect effect on the explicit power motive through any other enactment strategy (*n*Power2–5). Altogether, the model accounted for approximately 7 % of the variance in the explicit power motive, $R^2 = .07$, $F(6, 226) = 2.62$, $p = .02$.

Effects remained stable when using the relative prosocial enactment score (*n*Power1/*n*Power). No participant had a denominator of zero. First, AOD was significantly associated with relative *n*Power1, $B = .15$, $SE = 0.07$,

$t(231) = 2.27$, $p = .02$. Second, there were (marginally) significant direct effects of AOD, $B = .11$, $SE = 0.07$, $t(230) = 1.71$, $p = .09$, and relative *n*Power1, $B = .13$, $SE = 0.07$, $t(230) = 1.95$, $p = .05$, on the explicit power motive. Finally, there was a significant indirect effect of AOD through relative *n*Power1 on the explicit power motive, $b = .02$, $SE = 0.013$, $CI = .002$ to $.057$.

Direct and indirect effects on well-being

To test whether there was an indirect effect of AOD through the prosocial enactment of the implicit power motive (*n*Power1) and the explicit power motive on well-being, we conducted a mediation analysis with 5000 bootstrap samples using the SPSS macro Model 6 (Hayes 2012, 2014). Using this procedure, we computed a point estimate and a 95 % confidence interval for the mediation effect.

As listed in Table 2, AOD was significantly associated with *n*Power1, $B = .15$, $SE = 0.07$, $t = 2.23$, $p = .03$. Consistent with Table 3, when AOD and *n*Power1 were entered simultaneously to predict the explicit power motive, *n*Power1 was significantly associated with the explicit power motive, $B = .13$, $SE = 0.07$, $t = 1.98$, $p = .05$, whereas AOD was not, $B = .11$, $SE = 0.07$, $t = 1.71$, $p = .09$. Finally, when AOD, *n*Power1, and the explicit power motive were entered simultaneously to predict well-being, AOD and the explicit power motive were significantly associated with well-being whereas *n*Power1 was not (see upper half of Table 4).

The significance of the indirect effect of AOD through *n*Power1 and the explicit power motive on well-being was verified with bootstrapped errors and 95 % confidence intervals (CIs). Consistent with expectations, the indirect effect of AOD on well-being through the prosocial guidance (*n*Power1) and the explicit power motive was significant because the limits of the 95 % confidence interval did not include zero (see lower half of Table 4). Thus, the indirect effect of AOD on well-being was neither obtained through *n*Power1 alone nor through the explicit power motive alone but through the implicit prosocial underpinnings of the explicit power motive. Altogether, the mediation model accounted for approximately 18 % of the variance in well-being, $R^2 = .18$, $F(3, 229) = 17.28$, $p < .001$.

Effects remained stable when using the relative prosocial enactment score (*n*Power1/*n*Power). When AOD, relative *n*Power1, and the explicit power motive were entered simultaneously to predict well-being, AOD, $B = .35$, $SE = 0.06$, $t(229) = 5.73$, $p < .001$, and the explicit power motive, $B = .21$, $SE = 0.06$, $t(229) = 3.53$, $p < .001$, were significantly associated with well-being whereas relative *n*Power1 was not, $B = -.01$, $SE = 0.06$, $t(229) = -.18$, $p = .85$. More importantly, there was a significant indirect effect of AOD through relative *n*Power1 and the explicit power motive on well-being, $b = .04$, $SE = 0.01$, $CI = .001$ to $.013$.

Table 4 Direct effects of demand-related action orientation and indirect effect through the prosocial enactment of the implicit power motive and the explicit power motive on well-being (Study 2)

	Well-being			
	B	*SE*	*t*	*p*
Constant	.00	0.06	0.00	
Action orientation (AOD)	.35	0.06	5.74	.00
Prosocial guidance (*n*Power1)	−.02	0.06	−0.30	.76
Explicit power motive	.22	0.06	3.54	.00
Indirect effect of AOD on well-being through	*b*	*SE*	*Boot LLCI*	*Boot ULCI*
*n*Power1	−.00	0.01	−.028	.015
*n*Power1 and explicit power motive	.04	0.00	.001	.015
Explicit power motive	.02	0.02	−.003	.069

LLCI (ULCI) lower (upper) limit of confidence interval

Discussion

In Study 2, we replicated the relationships between action orientation, prosocial guidance, and the explicit power motive. Action orientation was conducive to the explicit power motive through the intrinsic, prosocial enactment of the implicit power motive—but not through strategies oriented toward status, coping, dominance/inhibition, and fear of powerlessness. The findings of Study 2 extended those obtained in Study 1 in several ways. First, we generalized the findings to a different work domain (i.e., students aspiring to become psychologists rather than teachers). Second, we generalized the finding to a different measure of the explicit power motive (i.e., a strong and integrated explicit power motive rather than a leadership motive). Third, we included well-being as a dependent variable in our analysis and found the indirect path from action orientation through the prosocial enactment of the implicit power motive to the explicit power motive to be associated with well-being (AOD → prosocial enactment of implicit power motive → explicit power motive → well-being).

General discussion

The Greek philosopher and mathematician Plato proposed that "the measure of a man is what he does with power". This remark illustrates that power is not per se good or bad but can be used in several ways. In the present research, we

examined a positive, prosocial side of the implicit power motive that has received little attention in empirical research despite its early conceptualization (McClelland 1970, 1975; Winter 1973). Following Kuhl and Scheffer (1999), we differentiated five ways to enact the implicit power motive and investigated personal antecedents and personal benefits of a prosocial way to enact power.

In two studies, we found that a prosocial enactment of the implicit power motive was associated with demand-related action orientation, that is, a high ability to self-regulate positive affect. Furthermore, a prosocial enactment was associated with an explicit leadership motive among future teachers (Study 1) and with a strong and integrative explicit power motive among future psychologists (Study 2). Both professions involve guidance and support of others so that explicit power strivings can be considered as important personal prerequisites for the job (Kazén and Kuhl 2011; McClelland 1975; Winter 1973). Finally, there was an indirect effect of action orientation through the prosocial enactment of the implicit power motive on the explicit power motive (Studies 1 and 2) and, in turn, on well-being (Study 2). The findings corroborate the importance of an implicit support of explicit power strivings (Gröpel 2008; Kazén and Kuhl 2011; Wagner et al. 2015) and specify a *prosocial* enactment of the implicit power motive (cf. Aydinli et al. 2014; Hofer et al. 2008) as pivotal for explicit power strivings and well-being among students aspiring prosocial professions.

Note that our measure of prosocial guidance (*n*Power1) indicated the simultaneous presence of an implicit power motive and its prosocial enactment. Thus, one may wonder what has driven the observed relationships. In our analyses we controlled for four alternative enactment strategies (*n*Power2 to *n*Power5). Action orientation did not correlate with any other strategy or the overall strength of the implicit power motive (*n*Power). Furthermore, findings remained stable when calculating prosocial guidance as the proportion of the implicit power motive (*n*Power1/*n*Power). These findings have several important implications. First, good and poor self-regulators strive for power to the same extent. We did not expect a personality disposition like action orientation to influence the strength of the implicit power motive that evolves early in the preverbal phase of childhood and is rather stable over time. Although action orientation also develops early on and is rather stable over time, the implicit power motive and action orientation originate from very different experiences and contexts during early childhood (McClelland et al. 1989; McClelland and Pilon 1983; Kuhl and Keller 2008; Kuhl and Völker 1998; Scheffer 2005). Instead, action orientation influences the *enactment* of the implicit power motive.

Second, some people (i.e., poor self-regulators) are less *able* to enact power in a prosocial way. At the same time, they are not restricted to a specific alternative strategy. Whether they tend to achieve status, cope with threats, dominate others, or fear the loss of power may be a function of the context and their current affective state. This is the very definition of having a state orientation (cf. Kuhl 1994). Many findings confirm that state-oriented individuals are able to feel and enact own preferences only under supportive conditions (Baumann et al. 2005; Baumann and Kuhl 2003, 2005; Koole et al. 2012; Kuhl 2000, 2001; Kuhl and Beckmann 1994). Although action-oriented individuals may also vary in the way they enact power across time and context, they are better able to select a strategy at their own volition and, according to our findings, tend to select a prosocial strategy. Thus, when evaluating men and women according to what they do with power (cf. Plato), we should be benignant because enacting power in a prosocial way is not only a question of choice but also of skill.

Third, our findings further support the assumption that intrinsic motivation involves unconscious workings of self-regulatory functions (Baumann et al. 2010; Kaschel and Kuhl 2004; Kuhl and Koole 2008; Kuhl and Scheffer 1999). Previous studies have demonstrated that the intrinsic enactment of affiliation (i.e., intimacy; Hofer and Busch 2011) and achievement motives (i.e., flow; Baumann et al. 2015; Baumann and Scheffer 2010, 2011) is associated with action orientation. To our knowledge, the present findings are the first to show that an intrinsic, prosocial enactment of the power motive is fueled by volitional functions such as the ability to intuitively self-generate positive affect: demand-related action orientation.

Finally, although implicit and explicit motives represent distinct motivational systems (Köllner and Schultheiss 2014; McClelland et al. 1989), high self-regulatory abilities have been found to support their context-adequate alignment and, in turn, well-being (Baumann et al. 2005; Kazén and Kuhl 2011; Thrash et al. 2010). Whereas previous work on action orientation has focused on the achievement domain (Baumann et al. 2005), the present findings show that action orientation also supports motivational functioning in the power domain. We expect this to generalize to the affiliation domain. However, motive congruence may not always be the best or only indicator of motivational functioning. Our findings show that congruence may be restricted to a single enactment strategy that appears especially adaptive in a given context (i.e., prosocial power for future teacher and psychologists). We expect action orientation to support such a fine-grained attunement across motive domains.

On a more general note, our approach to prosocial power provides a bridge between motivation research and self-regulation research. These two areas are intuitively close to another but have rarely been integrated on a theoretical level. The "what" of goal striving has been

investigated in motivation research whereas the "how" of goal striving has been a topic of self-regulation research (cf. Baumann et al. 2010). Our present findings show that both are intimately intertwined and can be assessed conjointly within an OMT (Kuhl and Scheffer 1999). This helps to better understand the fundamentally different sides to power that may range from the most inhuman dictatorship of Adolf Hitler to the charity of Mother Teresa (McClelland 1975; Winter 1973). There are certainly more features that differentiate these two distinct historical figures than motive enactment strategies. To more fully understand human motivation and personality functioning, it seems necessary to take several mechanisms that we study in separate research areas simultaneously into account, investigate their interactions, and integrate them into a broader theoretical framework. The theory of Personality Systems Interactions (PSI; Kuhl 2000, 2001) offers such a framework and has inspired the integration of self-regulatory processes into motivation research and our present approach to power.

Limitations and future perspectives

Our research is a first approach to the prosocial side of power and its role in social professions. Therefore, several limitations have to be taken into account that may be addressed in future research. First, our sample consisted of students aspiring to become teachers (Study 1) and psychologists (Study 2). Thus, we do not know whether our findings generalize to people who already work as teachers and psychologists and experience their impact on others on a daily basis. Future studies may focus on people who already work in social professions.

Second, we did not test whether our findings are specific to prosocial professions. A prosocial enactment may be adaptive for everybody—irrespective of the profession. In a large US telephone company, McClelland and Boyatzis (1982) found a high implicit power motive to predict the career success of nontechnical (but not technical) managers over the course of 16 years—but only if it was accompanied by activity inhibition (i.e., negations and passive phrases in the picture stories) that closely resembles the enactment strategy of dominance/inhibition (*n*Power4). These findings support the assumption that specific job characteristics (e.g., social vs. technical responsibilities) play a role in determining whether motives and specific enactment strategies are adaptive. In future studies, it would be informative to include a broader spectrum of social and nonsocial professions.

Third, we assessed only subjective well-being to estimate whether people personally benefit from a prosocial enactment of power. Although our findings show that implicit, prosocial underpinnings of the explicit power motive were conducive to well-being, they may not necessarily support other outcomes such as career success. The findings by McClelland and Boyatzis (1982) show that, at least among managers, the inhibition of power (*n*Power4) is a necessary condition for career success. Thus, different enactment strategies may be adaptive for different criteria of psychological functioning. In future studies, it would be informative to assess a broader range of criteria that may include non-reactive measures of well-being (e.g., health records, absenteeism), leadership quality (e.g., evaluations of teaching/counseling sessions through students, clients, colleagues, supervisors), and behavioral outcomes (e.g., students' performance or clients' improvement).

Finally, our data are cross-sectional and do not allow to draw causal inferences. Whereas action orientation (Kuhl and Beckmann 1994) and implicit motives (McClelland et al. 1989) are conceived as rather stable dispositions, enactment strategies for implicit motives as well as self-attributed motives vary more strongly over time and in response to context conditions (Baumann et al. 2005; Kuhl and Henseler 2004; Kuhl and Scheffer 1999). Nevertheless, we do not know whether action orientation helps students to select a matching field of study or whether it fosters the adoption of an enactment strategy that matches their professional interest. Furthermore, beneficial effects of action orientation often do not become evident unless there is some kind of stress (Koole et al. 2012). In future studies, it would be informative to experimentally manipulate context conditions and apply longitudinal study design.

Conclusion

Despite its bad reputation, power has a benevolent side and can be enacted in a prosocial way. Our findings show that it takes action orientation (i.e., a high self-regulatory ability) to bring out this prosocial side. Furthermore, power is not necessarily beneficial either for oneself (if enacted in a non-prosocial way) or for others (if enacted in a prosocial way) because a focus on the welfare of others is also associated with personal benefits. Action orientation helps to bring out these benefits and to attune motivational processes in a healthy way. However, a focus on prosocial guidance may not always be the most adaptive way to enact power. Status orientation, coping with power-related threat, demonstrating dominance, inhibiting power, and fear of being powerless may also be helpful for some people, in some contexts, and for some outcomes. Prior research suggests that action orientation is highly context-sensitive (cf. Koole and Jostmann 2004; Koole et al. 2012). Therefore, action orientation may be associated with less benevolent enactment strategies if the context requires this.

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