



 **Universität Trier**

Department of Psychology

Why They Rebel Peacefully:

On the Violence-Reducing Effects of a Positive Attitude Towards Democracy

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Abstract

Under the impression of Europe's drift into Nazism and Stalinism in the first half of the 20th century, social psychological research has focused strongly on dangers inherent in people's attachment to a political system. The dissertation at hand contributes to a more differentiated perspective by examining violence-reducing aspects of political system attachment in four consecutive steps: First, it highlights attachment to a social group as a resource for violence prevention on an intergroup level. The results suggest that group attachment fosters self-control, a well-known protective factor against violence. Second, it demonstrates violence-reducing influences of attachment on a societal level. The findings indicate that attachment to a democracy facilitate peaceful and prevent violent protest tendencies. Third, it introduces the concept of political loyalty, defined as a positive attitude towards democracy, in order to clarify the different approaches of political system attachment. A set of three studies show the reliability and validity of a newly developed political loyalty questionnaire that distinguishes between affective and cognitive aspects. Finally, the dissertation differentiates former findings with regard to protest tendencies using the concept of political loyalty. A set of two experiments show that affective rather than cognitive aspects of political loyalty instigate peaceful protest tendencies and prevent violent ones. Implications of this dissertation for political engagement and peacebuilding as well as avenues for future research are discussed.

Keywords: democracy, violence, attitude, political engagement, peacebuilding

Table of Content

Acknowledgements	2
Abstract	3
Table of Content	4
1. Current Research Perspective on Political System Attachment	5
1.1. Democracy as a Framework for Peacebuilding	6
1.2. The Present Thesis	8
2. Group Attachment as a Violence Prevention Resource	9
3. Political System Attachment as a Moderator of Political Engagement	11
4. Political Loyalty as a Positive Attitude towards Democracy	13
5. Emotional Attachment to Democracy as a Moderator of Collective Action.....	16
6. Original Manuscripts.....	18
6.1. With or Without Them.....	19
6.2. Peacefully Changing the World.....	54
6.3 Which Side Are You On?.....	66
7. General Discussion.....	135
7.1. An Attitudinal Perspective on Political Engagement.....	136
7.2. The Multidimensionality of Emotional Attachment to Democracy	136
7.3. Political System Attachment as a Peacebuilding Factor	137
7.4. Limitations and Avenues for Future Research	139
8. Conclusion	141
References	143
Author Contributions	160

1. Current Research Perspective on Political System Attachment

“Probably Hobbes got it right when he said that a leviathan . . . might be among the biggest violence reduction techniques ever invented” (Pinker, 2011, para. 32).

Influenced by the chaotic aftermath of the English Civil War, a refugee wrote what was to become one of the most influential philosophical works of the 17th century. *Leviathan*, Thomas Hobbes’ (1651) seminal work, was built around the idea that peace and unity of human kind can be achieved through a social contract that obliges people to obey to a political system. However, the unspeakable crimes committed in the first half of the 20th century by absolute and oppressive regimes defied this reasoning. As a consequence, social psychological research (e.g., Adorno, Frenkel-Brunswik, Levinson, & Sanford, 1950; Ferguson, 1942; Grodzins, 1956; Levinson, 1957; Stagner, 1940), just like Hobbes’ (1651) philosophical work a *child of its time*, developed rather under the impression of Europe’s drift into Nazism and Stalinism. Raising awareness about dangers associated with political system attachment¹ “became the overriding theme for many years to come” (Kosterman & Feshbach, 1989, p. 259) while neglecting possible positive implications.

Since then, social psychological research (e.g., Adorno et al., 1950; Altemeyer & Hunsberger, 1992; Feygina, Jost, & Geldsmith, 2010; Golec de Zavala, Guerra, & Simão, 2017; Jost & Kay, 2005; Pratto, Sidanius, Stallworth, & Malle, 1994; Sidanius, Feshbach, Levin, & Pratto, 1997; Spry & Hornsey, 2007) has identified a number of negative consequences regarding a person’s attachment to his or her political system, from prejudice and discrimination, to support of sexist and unscientific authorities, to acceptance of injustice,

¹ This dissertation uses the term *attachment* to describe a person's relationship to his or her political system. The author is aware that this term is suboptimal because it originates from parent-child bonding research (e.g., Bowlby, 1982). However, since this term is also used in the political context (e.g., Schatz, Staub, & Lavine, 1999), it serves as a working term.

to violence. In their pioneering work *The Authoritarian Personality*, Adorno and colleagues (1950) proposed a dispositional explanation for the rise of oppressive regimes. Not surprisingly, their newly developed scales focused on the negative aspects of system attachment. Even though the authors already differentiated between *genuine patriotism*, defined as an attachment to national values, and *pseudopatriotism*, an unreflected, uncritical form of attachment, they only operationalized the latter. Ignoring their own definitions, they labeled the scale measuring pseudopatriotism as patriotism. A differentiated analysis of political system attachment was neglected. Even today, social psychological research still emphasizes on the negative aspects. System justification theory (Jost & Banaji, 1994; Jost, Banaji, & Nosek, 2004; Jost, Pelham, Sheldon, & Sullivan, 2003), for example, researches system attachment from the perspective of a problematic palliative function. The theory postulates that there is a motive to rationalize the existing social order as fair and legitimate. These system-justifying beliefs exist even in disadvantaged groups and therefore contribute to the stability of unjust political systems.

Interestingly, a recent paper by Cichocka, Górska, Jost, Sutton, and Bilewicz (2018) found that some degree of system justification could be useful to stimulate peaceful forms of political engagement such as participation in peaceful political demonstrations or voting. The authors moreover reported that this relationship is stronger in democratic political systems when compared to nondemocratic ones. Unfortunately, boundary conditions – like the role of a democratic framework – that make nonviolent behavior more likely are commonly overlooked in empirical studies.

1.1. Democracy as a Framework for Peacebuilding

Peace psychology “promotes the nonviolent management of conflict and the pursuit of social justice” (Christie, Wagner, & Winter, 2001, p. 7). Besides direct strategies to combat violence such as mediating violent conflicts, peace psychology focuses on structural problems that contribute to the emergence of violence. In this regard, former United Nations (UN)

Secretary-General Boutros-Ghali (1992) introduced the concept of *peacebuilding*. Although the concept initially aimed at conflict cycles and post-conflict scenarios, it was soon extended with regard to preventive actions (see Boutros-Ghali, 1995). The UN (2008) nowadays defines peacebuilding as a “range of measures targeted to reduce the risk of lapsing or relapsing into conflict by strengthening national capacities at all levels for conflict management, and to lay the foundation for sustainable peace and development” (p. 18). In other words, peacebuilding promotes the idea of creating political structures that help people to resolve perceived injustice in nonviolent ways.

Shortly after the concept of peacebuilding was introduced, democratic governance was highlighted as the appropriate political framework for such an agenda (see Boutros-Ghali, 1996). In fact, liberal democracies harbor many violence-reducing aspects. First, they ensure that power is not exploited, by resting it on fundamental and inalienable principles like basic human rights, the rule of law, or constitutionalism (e.g., Konrad-Adenauer-Stiftung, 2011; United States Department of State, 2013). Second, the social norm of conflict resolution in liberal democracies strongly promotes nonviolence (e.g., Deutsch et al., 1957; Kahl, 1998; Risse-Kappen, 1995). Third, in contrast to authoritarian systems, liberal democracies offer a broad spectrum of ways, such as registered demonstrations or voting, to articulate and resolve perceived injustice in a peaceful manner (see Barnes & Kaase 1979; Inglehart, 1977; Sabucedo & Arce, 1991).

Despite these broad ranging implications of democracies, it is still in question how these positive aspects may influence nonviolent behavior on a psychological level. Political science literature (e.g., Krampe, 2016; Nilsson, 2012; Roberts, 2011; Rubin, 2006; Shepherd, 2015) already emphasize the support of the population towards political structures as a key element of post-conflict peacebuilding. Unfortunately, so far only a few empirical attempts (e.g., Booth & Seligson, 2009; Cichocka et al., 2018; Fennema & Tillie, 2001, Tausch et al., 2011) have been made to systematically research possible violence-reducing effects of

political system attachment. And thus, it is still in question how democratic systems enable people to act nonviolently on the basis of their attachment.

1.2. The Present Thesis

The dissertation at hand is an attempt to overcome the empirical emphasis on negative aspects of political system attachment and illuminate how democratic systems may incite nonviolent behavior. To accomplish this, I place current findings regarding violent-reducing aspects of political system attachment in a broader theoretical perspective. The present thesis is based on three empirical articles and is divided into four consecutive steps:

First, I highlight attachment on an intergroup level as a resource for violence prevention. Specifically, I hypothesize that group attachment is a source for self-control, a key factor against violence (e.g., Baron, 2003). In order to test this hypothesis, I investigate the effect of group attachment on a standard self-control measurement. Second, violence-reducing influences of attachment are then investigated on a societal level. I hypothesize that attachment to a democratic system facilitates peaceful political engagement and prevents a violent one. In order to test this hypothesis, I examine the relationship between political system attachment and different forms of protest tendencies. Third, I introduce the concept of political loyalty, defined as a positive attitude towards democracy. Based on attitude theories (e.g., Eagly & Chaiken, 1993), I hypothesize that attachment to a democratic system can best be conceptualized and operationalized as an attitude with an affective and a cognitive component. Fourth, I differentiate former findings regarding the relation between system attachment and protest tendencies by applying the concept of political loyalty. I hypothesize that affective rather than cognitive facets of political loyalty instigate peaceful and prevent violent protest tendencies. The present thesis ends by discussing how the work that I conducted during my doctoral studies contributes to a better understanding of violence-reducing implications of system attachment. I will discuss implications as well as limitations and propose avenues for future research.

2. Group Attachment as a Violence Prevention Resource

Based on: Sroka, I. M., Isemann, S. D., & Walther, E. (2017). With or without them:

Improving self-control in juvenile offenders. *Basic and Applied Social Psychology*, 39(5),

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The first aim of this dissertation was to highlight attachment as a resource for violence prevention on an intergroup level. While there is much social psychological research on negative implications arising from group interactions such as social pressure, outgroup derogation, or groupthink (e.g., Mallinson & Hatemi, 2018; Riek, Mania, & Gaertner, 2006; Russell, Hawthorne, & Buchak, 2015), affective bonds between individuals must first of all be understood as an evolutionarily adaptive system (Baumeister & Leary, 1995; Bowlby, 1982). Groups can be a source of support (e.g., Mullen & Cooper, 1994) and self-esteem (Smith, Murphy, & Coats, 1999), and even facilitate the learning of emotional and cognitive skills (e.g., Forsyth, 1990).

When it comes to violence prevention, an important resource is self-control, the capacity to alter one's own responses in order to forego short-term pleasures for the sake of long-term rewards (Mead, Alquist, & Baumeister, 2010). It is considered a key factor to human success and well-being (e.g., Boals, vanDellen, & Banks, 2011; Mischel, Shoda, & Peake, 1988; Tangney, Baumeister, & Boone, 2004). Tangney et al. (2004), for example, showed that self-control is positively associated with higher grades, fewer reports of psychopathology, higher self-esteem, less binge eating and alcohol abuse, better relationships and interpersonal skills, secure attachment, and more optimal emotional responses. Research (e.g., Baron, 2003; Longshore, Chang, & Messina, 2005; Piquero, MacDonald, Dobrin, Daigle, & Cullen, 2005) has furthermore shown that a lack of self-control is strongly related to offending and violence. It is not surprising that many attempts have been made to identify psychological mechanisms underlying self-control (Inzlicht, Legault, & Teper, 2014). Inzlicht and colleagues (Inzlicht & Schmeichel, 2012; Inzlicht, Schmeichel, & Macrae, 2014), for instance, highlight task

motivation as a crucial determinant of self-control performance. In other words, it is important to support long-term goals with a strong motivational reward. Concerning group attachment, such a motivational reward could result from the tendency to evaluate one's own group positively in comparison to others in order to maintain a positive social identity and therefore self-esteem (Tajfel & Turner, 1979, 1986). I therefore hypothesize that social groups can be a source of motivation, thus, for self-control.

To provide empirical evidence for the hypothesis, the motivational effect of group attachment on a standard self-control measurement was experimentally tested on a sample of 57 incarcerated male youths from a German youth detention center. Group attachment was induced through a biased questionnaire, containing positively framed questions and statements about a well-regarded intramural youth center. The youth center was then linked to a desired behavior by stating that the performance of the subject was of great importance to the center. In accordance with previous studies (e.g., Friese, Messner, & Schaffner, 2012; Gröpel, Baumeister, & Beckmann, 2014), participants conducted the d2-R, a cancellation test of attention and concentration (Brickenkamp, Schmidt-Atzert, & Liepmann, 2010), as a measurement for self-control right before and after the treatments. As hypothesized, group attachment led to higher d2-R performances in the post-treatment measurements when compared to the pre-treatment measurements. A control group, in comparison, was unable to improve its d2-R performances.

Opposing the common notion that attachment to a social group fosters aggressive behavior (e.g., Inzlicht & Kang, 2010; Struch & Schwartz, 1989), these results indicate that group attachment is much more complex, i.e., can under certain conditions also be used to strengthen resources like self-control, a well-known protective factor against violence (e.g., Baron, 2003; Longshore et al., 2005; Piquero et al., 2005). Research on the attachment to social groups might therefore contribute to future rehabilitation or prevention programs such as community youth programs.

3. Political System Attachment as a Moderator of Political Engagement

Based on: Isemann, S. D., Walther, E., Solfrank, S., & Wilbertz, F. (2019). Peacefully changing the world: Political system support facilitates peaceful, but prevents violent protest orientation among school students. *Peace and Conflict: Journal of Peace Psychology*.

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The second aim of this dissertation was to examine violence-reducing influences of attachment on a societal level since a person's attachment is not limited to social groups, but also exists with reference to the overall political system (e.g., Kosterman & Feshbach, 1989; Schatz, 1994). So far, implications of political system attachment have mainly been reported within the context of political engagement (see Booth & Seligson, 2009; Cichocka et al., 2018; Fennema & Tillie, 1999, 2001; Tausch et al., 2011). Political engagement refers to actions individuals take as representatives of their group to improve the group's situation (Wright, Taylor, & Moghaddam, 1990). It subsumes a wide spectrum of different activities, ranging from conventional forms like voting, to unconventional forms such as petitioning, to illegal forms including terrorist acts (Barnes & Kaase, 1979; Inglehart, 1977; Sabucedo & Arce, 1991).

A first important distinction can be made between normative (*within-system*) and nonnormative (*out-of-system*) activities, i.e., whether the actions taken are within the legal structure of a political system or not (Sabucedo & Arce, 1991). Interestingly, previous research (e.g., Tausch et al., 2011) found that normative forms of political engagement are associated with confidence in a system, whereas nonnormative forms are associated with detachment from the system. In terms of democracy, nonviolent conflict resolution is a strong norm (e.g., Rummel, 1997; Schwarzmantel, 2010) and numerous nonviolent behavioral alternatives (e.g., Barnes & Kaase 1979; Inglehart, 1977) are provided. However, "people will consider aggressive collective action as long as they do not have high hopes that peaceful strategies can help resolve an ongoing perceived social injustice" (Saab, Spears, Tausch, & Sasse, 2016,

p. 541). In other words, violence arises when nonviolent alternatives do not solve existing conflicts. This resonates with terrorism literature (e.g., Bal & van den Bos, 2017; Post, 2005; Sprinzak, 1991), which stresses the loss of confidence in the political system as a crucial factor within the radicalization process. Consequently, I hypothesize that political system attachment is a moderator between normative and nonnormative forms of political engagement. To be more precise, I hypothesize that attachment to a democratic system facilitates peaceful political engagement and prevents a violent one.

In order to test this hypothesis, the relationship between perceived injustice, political system attachment, and different (peaceful vs. violent) forms of protest tendencies was scrutinized on a sample of 145 students from a German comprehensive school. Perceived injustice was measured with items based on *relative deprivation theory* (Gurr, 1970; Runciman, 1966; see section five for more details) and attachment to the Federal Republic of Germany was measured with items based on Easton's (1965) concept of *political system support*, including the evaluation of values (e.g., welfare state), institutions (e.g., government, police, courts), and authorities (e.g., politicians). Participants furthermore evaluated three peaceful (petition, approved demonstration, civil disobedience) and three violent protest tendencies (violent demonstration, instrumental violence, hostile violence). As hypothesized, political system attachment was a positive predictor for peaceful and a negative predictor for violent protest tendencies. Indicated through an interaction effect, students with high system attachment showed peaceful protest tendencies especially when they perceived injustice.

These results are consistent with former findings (e.g., Cichocka et al., 2018; Tausch et al., 2011), suggesting that individuals who are attached to their political system act within in the norms of it. Consequently, in the field of peacebuilding, it is not only important to provide a democratic political framework, but also to take measures that strengthen people's attachment to it. In this respect, it stresses the importance of peaceful participation possibilities and democracy education.

4. Political Loyalty as a Positive Attitude towards Democracy

Based on: Isemann, S. D., Dechesne, M., & Walther, E. (2019). *Which side are you on?*

Political loyalty as a core concept of engagement. Manuscript in preparation.

The third aim of this dissertation was to reconceptualize political system attachment in order to enable a more differentiated analysis with regard to violence-reducing influences in democratic systems. For this purpose, the concept of political loyalty is introduced, defined as a positive attitude towards a democratic system. Defining the concept as an attitude has important advantages: First and foremost, attitudes offer a clear structure of the concept as attitude theories (e.g., Ajzen, 2001; Ajzen & Fishbein, 1980; Eagly & Chaiken, 1993, 1998; Hollander, 1971) commonly distinguish between three distinct components: Affect, cognition, and behavior. For example, the *attitude-behavior model* by Eagly and Chaiken (1993) postulate that attitudes manifest in affective feelings or emotions, cognitive thoughts, values, or beliefs, and corresponding behaviors regarding the attitude object. This differentiation is crucial because affects and cognitions can result in different outcomes (see Smith, Pettigrew, Pippin, & Bialosiewicz, 2012; Talaska, Fiske, & Chaiken, 2008).

Affects and cognitions also play an important role in people's attachment to the political system, as research on *political legitimacy* (e.g., Easton, 1965, 1975; Gilley, 2006; Weatherford, 1992; Weber, 1958), defined as "a person's belief that existing political institutions are the most appropriate or correct for society" (Lipset, 1959, p. 86), shows. On the one hand, political legitimacy has been described as "we-feeling or sense of community" (e.g., Easton, 1965, p. 185), optimism about the political system (e.g., Weatherford, 1992), as well as trust and confidence in the system (e.g., Tyler & Jackson, 2013). On the other hand, scholars also stress the internalization of common rules (e.g., Weber, 1958) and values (e.g. Easton 1965; Tyler & Jackson, 2013), such as the value of voting rights (e.g., Weatherford, 1992), as an equally important part of the concept. Thus, a strict distinction between affect and cognition might help to clarify the field. Moreover, the three components of attitude

indicate that affect and cognition predict behavior (Allport, 1935; Eagly & Chaiken, 1993). Defining political loyalty as a positive attitude to democracy therefore allows to consolidate research on people's political system attachment (e.g., Easton, 1965, 1975; Gilley, 2006; Weber, 1958; Weatherford, 1992) with research on political engagement (e.g., Barnes & Kaase, 1979; Inglehart, 1977; Sabucedo & Arce, 1991).

A second advantage of the attitude approach is that “attitudes can be measured” (Thurstone, 1928, p. 529). It means that attitudes can be meaningfully and accurately quantified through psychometric measurements. As a consequence, the concept of political loyalty can be captured and compared in terms of reliability and validity criteria. I therefore hypothesize that political system attachment can be conceptualized as an attitude and measured accordingly.

To test this hypothesis, I validate a political loyalty questionnaire, consisting of an affective and a cognitive component, based on an online survey including 506 participants. With regard to the affective component, a person's affective *emotional attachment* (EMA) to the political system, the three subdimensions constitutional patriotism, nationalism, and trust were identified. Constitutional patriotism is defined as positive affects towards democratic values, whereas nationalism are positive affects based on one's idealization of the system (see also Adorno et al., 1950; Staub, 1997). Trust can be understood as one's confidence that the political system is benevolent, honest, and competent (see Mayer & Davis, 1999; Mayer, Davis, & Schoorman, 1995). Items were generated based on diverse concepts in the literature, such as *constructive and blind patriotism* by Staub (1997) or the *model of organizational trust* by Mayer and colleagues (Mayer et al., 1995; Mayer & Davis, 1999). With regard to the affective component of political loyalty, a person's cognitive *internalization of democratic values* (INDEV), the three subdimensions human dignity, freedom of speech, and the right to a fair trial were identified. Based on findings of Kosterman and Feshbach (1989) and comparative constitutional law literature (e.g., Guhr, Moshtaghi, & Knust Rassekh Afshar, 2006; Jackson, 2004; Shulztiner & Carmi, 2014; Stone, 2005, 2010), items were generated

regarding the question of whether and to what degree people are willing to give up these fundamental principles.

Exploratory as well as confirmatory factor analysis confirmed this hypothesized factor structure (EMA and INDEV with three reliable subscales each). Additionally, different patterns of political loyalty across political orientation and party identification were discovered. On the one hand, the subscales constitutional patriotism and trust are highest in the middle of the left-right political orientation scale. On the other hand, INDEV subscales decreases and the subscale nationalism increases from left- to right-wing. Accordingly, individuals identifying with parties of the political center report high levels of trust into the state, while individuals identifying with left-wing parties are generally low in trust. This conveys first evidence that affective and cognitive components of a person's attachment to his or her political system have to be investigated separately.

A second online survey with 319 participants compared political loyalty with the concepts of political legitimacy (Weatherford, 1992) and right-wing authoritarianism (RWA; Altemeyer, 1981, 1988) – a refinement of Adorno et al.'s (1950) authoritarian personality – in order to substantiate convergent as well as divergent validity of political loyalty. As hypothesized, we found that political loyalty was positively associated with political legitimacy, except for the subscale nationalism. Nationalism was positively and INDEV subscales negatively correlated with RWA, confirming the notion that nationalistic feelings can be seen as an unreflected form of system attachment (e.g., Adorno et al., 1950; Schatz et al., 1999). Thus, the findings indicate that the political loyalty questionnaire is a construct-valid measure of a person's positive attitude towards democracy.

Finally, a third study was conducted to validate the external validity of the political loyalty questionnaire. For this purpose, two political groups, 47 left-wing protesters and 73 right-wing fraternity members, were compared. The fraternity members scored slightly right and the protesters clearly left on the political orientation scale. As anticipated, fraternity

member showed higher EMA subscales, especially nationalism scores, while protesters exhibited significantly higher scores of the INDEV subscale human dignity. Hence, it outlines the usefulness of the construct in political contexts.

Evidence across three studies confirm reliability and validity of the newly developed concept. Political loyalty was defined and conceptualized as a positive attitude towards a democratic system, covering cognitive as well as affective aspects. This has far-reaching consequences regarding the understanding of the relationship between system attachment and peaceful engagement. First, it follows from the three components of attitude that political loyalty predicts behavior (see Allport, 1935; Eagly & Chaiken, 1993). This bridges the gap between research on political system attachment and political engagement. Moreover, the strict distinction between affects and cognitions allows for a differentiated analysis, for example, whether specific political activities are more cognitively or affectively driven.

5. Emotional Attachment to Democracy as a Moderator of Collective Action

Based on: Isemann, S. D., Dechesne, M., & Walther, E. (2019). *Which side are you on? Political loyalty as a core concept of engagement*. Manuscript in preparation.

The fourth and last aim of this dissertation was to reassess and differentiate former findings indicating that individuals who are attached to their political system act within in the norms of it. As for political engagement, there is substantial research on people's participation in social movements, also known as *collective action* (e.g., Kelly & Breinlinger, 1996; Klandermans, 1997, 2004; Simon & Klandermans, 2001; Stürmer & Simon, 2004; van Zomeren, Postmes, & Spears, 2008). Research in this respect deals with the question of what mobilizes people to participate in social movements like the Civil Rights Movement, the March for Our Lives, or the School Strike for Climate.

A traditional assumption is that collective action can be seen as a response to injustice (for an overview see van Zomeren et al., 2008). However, most researchers (e.g., Gurr, 1970; Merton, 1957; Pettigrew, 1967; Runciman, 1966; Williams, 1975) stress that injustice does

not derive merely from objective living conditions but rather social comparison processes. A phenomenon called *relative deprivation*. When it comes to the prediction of collective action, there is empirical evidence (e.g., de La Rey & Raju, 1996; Smith et al., 2012) that especially affective aspects of relative deprivation like feelings of anger and frustration explain a great proportion of the variance. This is consistent with research on intergroup relationships (e.g., Pettigrew & Tropp, 2008; Stangor, Sullivan, & Ford, 1991; Talaska et al., 2008). Talaska et al. (2008), for instance, reported that negative affects (prejudices) towards members of other groups are twice as closely related to discrimination as cognitions (stereotypes) are. Based on these findings, I hypothesize that affective rather than cognitive facets of political loyalty instigate peaceful and prevent violent protest tendencies.

In order to test this hypothesis, the relationship between relative deprivation, group identification, political loyalty, and different (peaceful vs. violent) forms of protest tendencies was researched in an experiment with 63 psychology students. Relative deprivation was experimentally manipulated with the help of a newly developed paradigm by reminding students of their efforts to become psychologists and then confronting them with relatively low (relative deprivation) or high (relative gratification) income predictions compared to other professions. In addition to the political loyalty questionnaire, participants were asked to what extent they identified themselves as psychologists. Peaceful and violent protest tendencies were measured with the *political mobilization scale* by Moskalenko and McCauley (2009). As hypothesized, EMA and not INDEV worked as a positive predictor for peaceful protest tendencies – especially when group identification was high – and a negative predictor for violent ones. These findings were replicated in a second experiment with 98 psychology students. In addition to the first experiment, actual protest behavior was assessed. After the relative deprivation paradigm and questionnaires, participants were asked whether they were willing to assist the student council in preparing an actual rally, ranging from signing a petition to creating a protest poster. Again, EMA and not INDEV worked as a positive

predictor, through an interaction effect with group identification, for peaceful and as a negative predictor for violent protest tendencies. Furthermore, peaceful protest tendencies were positively associated with actual protest behavior.

Across the two experiments, the role of political system attachment as a factor of peacebuilding was highlighted as it serves as a moderator between normative and nonnormative forms of political engagement. However, in contrast to former findings (e.g., Cichocka et al., 2018; Tausch et al., 2011), the current studies show that this relationship is affectively and not cognitively driven with regard to collective action. It highlights the advantages of defining and conceptualizing political loyalty as an attitude by showing the importance of distinguishing between affects and cognitions when it comes to predicting political engagement.

6. Original Manuscripts

The following section contains the three original manuscripts that constitute the basis of this dissertation. The articles are presented in the order in which they were discussed in the previous sections. Please note that the page numbers in this section are taken from the original manuscripts.

6.1. With or Without Them

Sroka, I. M., Isemann, S. D., & Walther, E. (2017). With or without them: Improving self-control in juvenile offenders. *Basic and Applied Social Psychology*, 39(5), 277-286.

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With or without them:
Improving self-control in juvenile offenders

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Abstract

Increasing self-control is a key-factor in the rehabilitation process of young criminals. Based on two well established theories of self-control, we tested a short mindfulness training and the motivational effect of group identification on a standard self-control measurement in an sample of 57 incarcerated male youth from a German youth detention center. In accordance with our hypothesis, both treatments led to higher self-control than a control group. These findings indicate that mindfulness and group identification foster self-control even in an untrained sample of incarcerated young men and contribute therefore to resource-oriented successful rehabilitation programs.

Keywords: self-control, juvenile offenders, mindfulness, group identification

With or without them:**Improving self-control in juvenile offenders**

Juvenile rehabilitation constitutes a central task of modern societies. Research on criminal careers (e.g., Falk et al., 2014; Farrington et al., 2006; Moffitt, 1993; Moffitt, Caspi, Harrington, & Milne, 2002; Piquero, Farrington, & Blumstein, 2007) shows that the majority of crimes are committed by a small number of persistent offenders, who start offending at an early age. However, only about 50 % of them (Lipsey, 2009) are successfully rehabilitated. One reason may be that most rehabilitation programs do not draw on the resources but rather on the weaknesses of the offenders, especially deterrent or supervisory interventions (see Koehler, Lösel, Akoensi, & Humphreys, 2013). In this sense, a strengths-based rehabilitation approach, the *good lives model* by Ward and colleagues (e.g. Ward, 2002; Ward & Gannon, 2006; Ward & Stewart, 2003), postulates that reducing recidivism is most effectively achieved by implementing ways of living that are perceived as fulfilling and coherent by the offender.

One prominent factor associated with such a fulfilling life is the human ability to exert self-control (see Rothbaum, Weisz, & Snyder, 1982). Self-control can be defined as the capacity to alter one's own responses, in order to forego short-term pleasures for the sake of long-term rewards (Mead, Alquist, & Baumeister, 2010). Often considered as a multidimensional construct (Duckworth & Kern, 2011), self-control influences the execution of many different tasks involving the inhibition of unwelcomed impulses or the attentional regulating of targets against distractors. This is why self-control is considered as essential for many everyday contexts like achievement or social situations (e.g., Baumeister, Bratslavsky, Muraven, Tive, 1998). The importance of self-control is especially evident in deviant behavior. For example, in Gottfredson and Hirschi's (1990) *general theory of crime*, criminal behavior is the consequence of low self-

1 control and crime opportunities. In support of this notion, Tangney, Baumeister, and Boone
2 (2004) showed that self-control is positively correlated with higher grades, fewer reports of
3 psychopathology, higher self-esteem, less binge eating and alcohol abuse, better relationships
4 and interpersonal skills, secure attachment, and more optimal emotional responses. Supportively
5 research has shown that low self-control is strongly related to juvenile offending and recidivism
6 (e.g. Baron, 2003; Langton, 2006; Longshore, Chang, & Messina, 2005, Piquero, MacDonald,
7 Dobrin, Daigle, & Cullen, 2005; Vazsonyi, Pickering, Junger, & Hessing, 2001). This research
8 stresses the importance of resource-based interventions that are constitutional in many
9 established programs. Recent research (e.g., Andrews & Bonta, 2010; Koehler et al., 2013;
10 Lipsey, 2009; Lipsey & Cullen, 2007; MacKenzie, 2006) on the effects of offender treatment
11 programs investigated, for example, the effectiveness of theory-based interventions, that address
12 so-called *risk-need-responsivity* principles. According to Andrews and Bonta (2010), these
13 treatments should correspond to the offender's risk of reoffending (risk principle), his dynamic
14 risk factors – changeable factors that are functionally related to the criminal behavior – (need
15 principle), and his learning style, capabilities, and strengths (responsivity principle). One well-
16 established (e.g., Palmer et al., 2011) example is the *Addressing Substance-Related Offending*
17 (ASRO; McMurrin & Priestley, 2004) program, a community-based program for substance-
18 using offenders. One key aspect of ASRO is improving self-control through cognitive-behavioral
19 techniques like coping with cravings as well as avoiding high risk situations. Following these
20 previous work, the present article wants to explore further techniques to improve self-control as a
21 key factor of offender treatment.

22 Self-control has inspired firm theorizing with two theories dominating the literature:
23 First, the *strength model* (e.g., Baumeister et al., 1998; Baumeister, Schmeichel, & Vohs, 2007)

1 postulates that capacity depends on a limited resource, leading to short-term impairments
2 described as *ego depletion*. In this respect, there is a current debate in the self-control literature
3 (see Carter & McCullough, 2013; Dang, 2016; Hagger & Chatzisarantis, 2016; Hagger, Wood,
4 Stiff, & Chatzisarantis, 2010a; Witter & Zenker, 2017; Baumeister & Vohs, 2016) about the
5 magnitude and even existence of the ego depletion effect. The present study wants to refrain
6 from this debate to a certain degree as it focuses on the trainability rather than the consequences
7 of exerting self-control. Based on Baumeister et al.'s (Baumeister et al., 1998; Baumeister et al.,
8 2007) famous analogy of self-control being a muscle getting tired during exercise, Hagger,
9 Wood, Stiff, and Chatzisarantis (2010b) formulate an ego depletion independent trainability
10 hypothesis stating that „as a muscle can improve its strength and endurance through regular
11 training, frequent engagement in tasks that require self-control is expected to lead to
12 improvements in self control“ (p. 72). One key-method to improve self-control strength is
13 mindfulness (e.g., Masicampo & Baumeister, 2007). Mindfulness can be defined as the
14 “awareness that merges through paying attention on purpose, in the present moment, and
15 nonjudgmentally to the unfolding of experience moment by moment” (Kabat-Zinn, 2003,
16 p. 145). Friese, Messner, and Schaffner (2012) investigated short-term consequences of a
17 mindfulness manipulation under conditions of limited self-control strength. The result suggests
18 that mindfulness training serve as a strategy to foster self-control under conditions of low
19 resources. The authors speculate that mindfulness could increase self-awareness or lead to deep
20 relaxation. Both of these mechanisms, increased self-awareness (e.g., Alberts, Martijn, & de
21 Vries, 2011) and deep relaxation (e.g., Tyler & Burns, 2008), have shown to reduce ego
22 depletion presumably because they restore energetic forces. In addition, there is empirical
23 evidence that mindfulness training has positive effects on related aspects such as emotion

1 regulation (e.g., Lutz et al., 2014), attention regulation (e.g., Hodgins & Adair, 2010), working
2 memory (e.g., Mrazek, Franklin, Phillips, Baird, & Schooler, 2013), or executive functioning
3 (e.g., Zeidan, Johnson, Diamond, David, & Goolkasian, 2010).

4 Second, the *motivational account* (Inzlicht & Schmeichel, 2012) suggests that ego
5 depletion can be explained by a shift in motivation away from further restraint and toward
6 gratification. Thus, it is important to support desirable behavior with a strong motivational
7 reward, like the identification with a favorable group (Turner, Hogg, Oakes, Reicher, &
8 Wetherell, 1987). In a set of four experiments, Job, Dweck, and Walton (2010) demonstrated that
9 people, who viewed their self-control capacity as unlimited, did not show ego depletion after
10 exertion. The results indeed suggest that ego depletion is about people's hold beliefs rather than
11 actual resource depletion. In addition, Job, Bernecker, Miketta, and Friese (2015) showed that
12 exerting self-control causes a shift in motivation toward resting in individuals convinced that
13 willpower is limited. Following Inzlicht and Schmeichel's (2012) approach, it is therefore
14 important to support an intended behavior with a strong motivational reward in order to protect it
15 from alternative behavioral impulses. One of those motivational rewards may result from
16 identification with a favorable group (e.g., Tajfel, 1978; Turner, Hogg, Oakes, Reicher, &
17 Wetherell, 1987). Tajfel (1982) notes that group identification needs the individual's cognitive
18 awareness of membership and the evaluative value connotation associated with it. According to
19 Tajfel and Turner's (1979, 1986) *social identity theory*, an individual's self-esteem is based on
20 the positive value of the group, he identifies with. Consequently, there is a tendency to evaluate
21 one's own group positively in comparison to other groups. Furthermore, Baumeister and Leary
22 (1995) describe the *need to belong* as a fundamental human need to form and maintain lasting,
23 positive, and significant interpersonal relationships. This need is innate, a consequence of

1 evolution, and therefore universal among human beings. Eisenberger, Lieberman, and Williams
2 (2003) showed, that social pain deriving from social exclusion is similar to the neurocognitive
3 function of physical pain. Accordingly, many researchers (e.g., Cohen & Wills, 1985; Krause,
4 1986; Semmer et al., 2008; Wood, Maltby, Gillett, Linley, Joseph, 2008) stress the positive
5 effects of social support on one's well-being.

6 Finally, we want to investigate possible individual differences concerning the
7 effectiveness of our treatments. Many authors like Harkness and Lilienfeld (1997) stress the
8 importance of personality traits for treatment planning as therapists need to know who benefits
9 from which treatment in what amount. In this respect, mindfulness has been found to correlate
10 with certain personality traits such as neuroticism and conscientiousness (see Giluk, 2009).
11 Furthermore, there is evidence (see de Vibe et al., 2015) that personality traits moderate effects
12 of mindfulness interventions. Hence, we not only investigate possible self-control improvements
13 of our treatments, but additionally try to find out who benefits from which treatment.

14 In order to test the applicability of two well established theoretical accounts, the strength
15 model and the motivational account, to find the best substantiated treatment for juvenile
16 offenders, we compared a mindfulness training (strength model) with the effect of group
17 identification (motivational account) in their positive influence on self-control. A neutral control
18 group served as a base-line for comparison.

19 **Method**

20 **Participants**

21 Participants were 57 incarcerated male youth (age $M = 19,58$ years, $SD = 1,75$, range 17-
22 23 years) from a German youth detention center. Regarding the form of incarceration, 32 % were
23 recruited from the open (just sleep in the center), 33 % from the half open (being able to spend

1 some weekends at home), and 35 % from the closed regime. Seventy percent of the participants
2 reported violent, 18 % property, 5 % drug-related, and 4 % sex crime and homicide to be their
3 most serious offenses.

4 **Procedure**

5 After a short welcome, participants were asked to fill out the *Freiburger Personality*
6 *Inventory – Revised* (FPI-R; Fahrenberg, Hampel, & Selg, 2001) as well as a demographic and
7 criminological data questionnaire. Subsequently, they conducted a *d2 Test of Attention –*
8 *Revision* (d2-R; Brickenkamp, Schmidt-Atzert, & Liepmann, 2010) as a pre-treatment
9 measurement. They were then randomly (following a fixed sequential sequence: 1 =
10 mindfulness, 2 = identification, 3 = control) assigned to one of three 10 minutes lasting
11 treatments. Having completed one of the three treatments, all participants conducted the d2-R for
12 a second time as a post-treatment measurement. Finally, they were debriefed and collectively
13 rewarded with new DVDs for the library.

14 **Materials**

15 **Freiburger Personality Inventory – Revised.** The FPI-R (Fahrenberg et al., 2001) is a
16 personality inventory for adolescents and adults (aged 16 years to older). It consists of 138 items
17 divided into 12 dimensions: Life satisfaction, social orientation, achievement orientation,
18 inhibitedness, excitability, aggressiveness, strain, somatic complaints, health concerns,
19 frankness, extraversion, and emotionality. The internal consistency (Cronbach's alpha) of the
20 FPI-R varies between $\alpha = .73$ and $\alpha = .83$, depending on the scale. Internal validity was reinsured
21 by the convergence of factor, itemmetric and confirmatory cluster analysis. Empirical validity
22 was confirmed through diverse correlations, e.g. with self- and stranger-ratings as well as
23 personality questionnaires.

1 **d2 Test of Attention – Revision.** The d2-R (Brickenkamp et al., 2010) is a cancellation
2 test of attention and concentration. In accordance with previous studies (e.g. Friese et al., 2012;
3 Gröpel, Baumeister, & Beckmann, 2014) we used the d2-R as a measurement for self-control
4 strength. As shown in these previous studies, the d2-R requires attentional control because
5 participants were asked to discriminate between very similar stimuli and inhibitory control
6 because the inhibition of the reaction towards similar but false stimuli is necessary. Furthermore,
7 as it is not allowed to bring external computers, laptops, or tablets into the youth detention
8 center, we needed a paper-and-pencil measurement. The paper-and-pencil version of the d2-R
9 consists of the letters *d* and *p*, which are distributed in 14 rows with 57 characters each
10 (Brickenkamp et al., 2010). Every letter is marked with one to four dashes above and/or below,
11 with a maximum of two dashes on the top and two at the bottom. Participants are asked to
12 faultlessly cross out as many *d* letters with two dashes as possible with a time limit of 20 seconds
13 per row, leading to a total testing time of 4 minutes and 40 seconds. We used the d2-R test score
14 *concentration performance* (d2-R CP) as dependent variable. It ranges from 70 to 130 and
15 derives from the total number of items processed minus the errors of commission. In their d2-R
16 manual, Brickenkamp et al. (2010) reported a d2-R CP reliability (Chronbach’s alpha) for 17-19
17 and 20-39 year old participants of .92. In the present sample d2-R CP reliability was even higher
18 with Chronbach’s alpha of .97 in the pre-treatment and .98 in the post-treatment measurement.

19 **Mindfulness treatment.** In the first experimental treatment the participants completed a
20 short mindfulness exercise. The exercise was based on the popular *Vipassana* meditation, a
21 mindfulness technique described by Hart (1987) as the “systematic and dispassionate observation
22 of sensations within oneself” (p. 91). After receiving general information about the training and
23 an instruction how to maintain an upright but comfortable seating position, participants were

1 asked to focus their attention on the sensation of breath in the nostrils, while ignoring other
2 sensations; especially upcoming thoughts. In the case thoughts arise, they should gently swipe
3 the thoughts away and get back to the sensation of breath. To ensure that the participants stayed
4 focused throughout the training, they were constantly reminded once per minute to swipe away
5 upcoming thoughts and get back with their attention to the sensation of breath.

6 **Identification treatment.** In the identification treatment the participants were motivated
7 through group identification with the intramural learning center *Lichtblick (bright spot)*, in order
8 to overcome ego depletion. Lichtblick is well regarded among the inmates for its wide range of
9 social activities such as playing pool billard, playing music instruments, creating own podcasts,
10 writing newspaper articles, or reading books in a library. After reading out some general
11 information about the center, the participants were asked to fill out a biased questionnaire,
12 containing a positively framed question (e.g., “Why do you personally think that Lichtblick is
13 important for the prison inmates?”) and 12 positively framed statements (e.g., “Every prison
14 should have a place like that.”, rated on 6-point Likert Scales) about the center. Finally, to keep
15 Lichtblick salient, the inmates should choose and keep one of eight printed out logos of
16 Lichtblick (see Appendix A) and were told that their performance of the following test was
17 important for the center.

18 **Control treatment.** We controlled for possible procedural confounds in the control
19 group by giving a standardized treatment, preventing behavior that could on the one hand lead to
20 further ego depletion or on the other hand foster self-control. In this regard, the participants were
21 asked to listen to parts of the German audio version of the Wikipedia article *Polar bear*
22 (Podpedia, 2006). We chose this audio article because it provided ordinary information about an
23 unrelated topic in a neutral tone, e.g. without any sound effects.

1 Results

2 We didn't find any important differences regarding the distributions of age, language,
3 educational level, handedness, and the need for optical aid between the three groups.

4 Self-control performance between groups and measuring times

5 Following the above assumptions, we expected a self-control improvement after the
6 mindfulness and the identification treatment. Based on Trafimow's recent work (e.g., Trafimow,
7 2003; Trafimow & Earp, 2017; Trafimow & Marks, 2015), we banned null hypothesis
8 significance testing and focused on effect sizes¹.

9 Initially, we compared d2-R CP means between the treatments for the pre-treatment and
10 post-treatment measurement separately. Before the treatments, there were only small d2-R CP
11 mean differences between mindfulness and control treatment ($M_{\text{mindfulness}} = 95.32$,
12 $SD_{\text{mindfulness}} = 12.40$; $M_{\text{control}} = 94.00$, $SD_{\text{control}} = 10.59$; Glass's $\Delta = 0.13$)² as well as identification
13 and control treatment ($M_{\text{identification}} = 98.11$, $SD_{\text{identification}} = 8.82$; Glass's $\Delta = 0.39$)³. However, we
14 found large d2-R CP mean differences between mindfulness and control treatment
15 ($M_{\text{mindfulness}} = 105.79$, $SD_{\text{mindfulness}} = 11.33$; $M_{\text{control}} = 95.74$, $SD_{\text{control}} = 9.05$; Glass's $\Delta = 1.11$)⁴ as
16 well as identification and control treatment ($M_{\text{identification}} = 107.89$, $SD_{\text{identification}} = 10.70$; Glass's Δ
17 $= 1.34$)⁵ after the treatments.

18 In order to identify possible improvements, we furthermore compared d2-R CP means
19 between the measuring times for each treatment. As hypothesized, there were large
20 improvements⁶ after the mindfulness treatment (Glass's $\Delta = 0.84$)⁷ and the identification
21 treatment (Glass's $\Delta = 1.11$)⁸ but only a small improvement after the control treatment (Glass's
22 $\Delta = 0.16$)⁹. For a better understanding (and in accordance with Valentine, Aloe, & Lau, 2015) of
23 d2-R CP improvements please see Figure 1 and Table 1.

1 **Personality and self-control improvement**

2 Finally we examined possible links between one's personality and self-control
3 improvement within the two experimental groups. By doing so, we try to answer the questions,
4 who benefits from which treatment and for whom a treatment maybe contraindicated. In the
5 identification treatment, no large (based on Cohen's, 1988, recommendation of Pearson's $r \geq$
6 .50) correlations between FPI-R dimensions and d2-R CP improvement (post-treatment d2-R CP
7 - pre-treatment d2-R CP) were found (see Table 2). In the mindfulness treatment the FPI-R
8 dimension *Extraversion* showed a large positive (Pearson's $r = .68$) and the dimension *Physical*
9 *Complaints* a large negative (Pearson's $r = -.50$) correlation with d2-R CP improvement (see
10 Table 2).

11 **Discussion**

12 From a resource-based view on juvenile rehabilitation and the idea that exerting self-
13 control is the key factor in offenders' reintegration we showed self-control improvement in a
14 sample of juvenile offender. Confirming our hypothesis, we found evidence that mindfulness as
15 well as group identification led to higher d2-R CP. In fact, d2-R CP turned out to be largely
16 higher in the post-treatment measurements when compared to the pre-treatment measurements.
17 For the control treatment we observed a small pre-post-treatment improvement due to learning.
18 Concerning mindfulness, the improvement was furthermore correlated with the FPI-R
19 dimensions *Extraversion* and *Physical Complaints* suggesting that impulsive, active, and vivid
20 individuals benefit the most from the mindfulness treatment while for individuals complaining
21 strongly about physical symptoms the observation of their physical sensations may be
22 contraindicated. The large effect sizes observed after a comparatively short time (approximately
23 10 minutes) of treatments in an untrained sample support the applied value of our findings.

1 However, we also registered some limitations and implications for future research. In fact, we
2 identified four points future studies should address: First, for self-control being often considered
3 a multidimensional construct (Duckworth & Kern, 2011), we naturally did not cover all aspects
4 of the concept but rather focused on task performance (see Baumeister et al., 1998) as one highly
5 important aspect of self-control. As a further step, additional self-control measures, especially
6 behavioral aspects of self-control, should be investigated. Miles et al. (2016) pointed out that
7 most self-control research relies on lab-based measures, which does not generalize to other self-
8 control tasks. It is important to note, that task performance in the d2 test is positively correlated
9 with many behavioral measures like the BMI in obesity research (e.g., Cserjési, Luminet,
10 Poncelet, & Lénárd, 2009) and the symptoms of ADHD in children (e.g., González-Castro,
11 Rodríguez, Cueli, García, & Alvarez-García, 2015). Nevertheless, future studies should
12 demonstrate possible behavioral consequences such as reduced impulsivity in order to prove the
13 applicability of the treatments. Second, because our investigation time was strongly restricted by
14 the institution, our study did not address the long-term effects of self-control training. Although
15 there is evidence for long-term self-control improvement through mindfulness (e.g., Bögels,
16 Hoogstad, van Dun, de Schutter, & Restifo, 2008) these positive effects should be tested in a
17 sample of juvenile offenders in future studies as well as the effects of the group identification
18 training. Hence, we suggest longer training intervals as well as follow up measurements. Third,
19 participants in the identification treatment were probably more actively involved in their
20 condition than participants in the control treatment. Thus it might be the case that self-control
21 improvement in the identification group can be alternatively explained with higher activity in
22 general. Miles et al. (2016), for example, stress the importance of active control groups in order
23 to control for these effects. Hence, future studies should include a more active and therefore

1 more comparable control treatment. However, the mindfulness treatment demonstrate that active
2 behavior is not a necessary requirement to increase one's self-control. In the mindfulness (task:
3 observe the sensation of breath in the nostrils) as well as the control treatment (task: listen to
4 parts of an audio version of a Wikipedia article) participants were passively focusing on a
5 stimulus. Finally, future studies should assess further information about the engagement of
6 participants, for example with the help of manipulation checks, in order to get a deeper
7 understanding of the effects of both treatments. Despite these limitations, our findings already
8 hold strong implications for future resource-oriented rehabilitation programs. The following
9 paragraphs want to elaborate some arguments, in this respect.

10 Making use of the strength model of self-control, results suggest that ten minutes of
11 mindfulness training help to foster self-control. Against the backdrop that mindfulness research is
12 mainly conducted with already trained participants (e.g., Frieese et al., 2012) or with intensive
13 training and long intervals between the measurements (e.g., Leonard et al., 2013), our results show
14 that untrained individuals could profit from the training. We argue that mindfulness constitutes an
15 „observation of sensations within oneself“ (Hart, 1987, p. 91). Referring to other studies on
16 mindfulness (e.g., Alberts et al., 2011; Frieese et al., 2012; Tyler & Burns, 2008), the pre-post-
17 treatment improvement might therefore be explained through increased self-awareness or deep
18 relaxation. In their theory of volition, Kuhl and Furmann (1998) differentiate between self-
19 regulation and self-control. In this respect, self-regulation is about “maintaining one's action in
20 line with one's integrated self” (p.15). Hence, mindfulness may foster self-regulation through
21 increased self-awareness (see Alberts et al., 2011).

22 To the best of our knowledge, this is the first study investigating effects of mindfulness
23 on participants without prior knowledge or training. Furthermore, we want to stress out that

1 mindfulness provides an easily implemented opportunity for incarcerated youth to train self-
2 control without the need for supervision. The technique is simple and the training can be
3 conducted unattended on many different occasions – especially in quiet environments such as
4 prison cells. We therefore want to encourage future research of mindfulness in forensic contexts
5 regarding its possible long-term effects on self-control and recidivism.

6 With our group identification treatment, we successfully tested the applicability of a
7 treatment related to Inzlicht and Schmeichel’s (2012) motivational account. In accordance with
8 our hypothesis, an individual’s identification with his favorable group seems to be a strong
9 motivational resource in order to buffer against ego depletion and helps to maintain cognitive
10 resources. This finding highlights the importance of the social context for self-control.

11 Participants in the identification treatment were asked to exert themselves for their ingroup. This
12 may point to an increased motivation to exert self-control preventing a shift toward gratification
13 (see Inzlicht & Schmeichel, 2012). It resonates with Kuhl and Furmann’s (1998) definition of
14 self-control as a process “supporting the maintenance of an active goal” (p. 15) as participants in
15 this treatment were asked to achieve a specific goal, namely succeeding in the second d2-R test
16 for their ingroup.

17 The findings of our group identification task are of practical importance because little
18 attention has been paid to social identification processes in terms of reducing the recidivism of
19 juvenile offenders yet (see Lipsey, 2009). Contradicting the common notion that group
20 interactions are recidivism risk factors in rehabilitation (e.g., Martinez & Abrams, 2013), our
21 results suggest that social identification can be a resource of self-regulation and may be therefore
22 applied in future rehabilitation or prevention programs. One possible field of application might
23 be community youth programs. Investigating the structure and social context of adolescent

1 leisure activities and how this relates to antisocial behavior, Mahoney and Stattin (2000) argue
2 that „the issue is not whether an individual is engaged in an activity – the issue appears to be
3 what the individual is engaged in, and with whom“ (p. 123). The authors conclude that it is better
4 to be uninvolved than to participate in unstructured activities with a high number of deviant
5 youth. With our identification treatment, we provide a promising theory-based strategy to
6 structure such community programs.

7 Finally, we briefly want to address the question whether the improvements of both
8 experimental conditions to some degree contradict the underlying theories. In other words, can
9 the strength model resolve the self-control improvement of the identification treatment and can
10 the motivational account resolve the improvement of the mindfulness treatment? On the one
11 hand, Teper and Inzlicht (2013) found evidence that mindfulness improves executive
12 functioning, hence cultivates the capacity to monitor for goal conflicts (Inzlicht, Legault, &
13 Teper, 2014). Besides the motivational shift, Inzlicht and Schmeichel (2012) already postulate a
14 parallel shift in attention away from cues signaling the need to control and toward cues signaling
15 the possibility of reward, hence they highlight the ability “to notice when control is actually
16 required” (p. 455). On the other hand, Baumeister and Vohs (2016) linked the motivational shift
17 postulated by Inzlicht and Schmeichel (2012) “to the expenditure and depletion of energy“
18 (p.100). While a shift in motivation can very well be explained through depletion of energy, it is
19 rather difficult to explain why fostering motivation would increase a limited resource. Sticking
20 with the muscle analogy, the questions remains of how an untrained muscle could suddenly
21 increase its strength? Explaining this effect would require many additional assumptions (e.g.,
22 that people were not ego-depleted and therefore the muscle was not tired) but this would render
23 the model unfalsifiable (see Lurquin & Miyake, 2017; Trafimow, 2009). Thus, we think that our

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Footnotes

¹Beside Cohen's d , two additional effect sizes were computed building on the *tripartite assumption* (TA). According to Trafimow (2017), the TA assumes that there are three sources of systematic variance in the dependent variable (σ_Y^2): systematic variance associated with the manipulation (σ_{IV}^2), with other (unknown) variables (σ_O^2), and randomness (σ_R^2). The author argues that Cohen's d denotes σ_Y^2 in the dependent variable and therefore confounds σ_O^2 and σ_R^2 . In order to eliminate this confound, the square root of the total variance could be replaced with the square root of either σ_O^2 or σ_R^2 . In the case σ_O^2 is used, it clears the denominator from the independent variable and from randomness (see also Trafimow, 2014). In the case σ_R^2 is used, it clears randomness from the independent variable and from other (unknown) variables.

Accordingly, we define effect size *other* (ES_O) as the difference between d2-R CP means divided by the square root of σ_O^2 and effect size *random* (ES_R) as the difference between d2-R CP means divided by the square root of σ_R^2 . For the necessary equations please see Trafimow (2017). As reliability measure of the dependent variable ($\rho_{YY'}$) we used the internal consistency (Chronbach's alpha) of .92 as reported by Brickenkamp et al. (2010) for d2-R CP for 17-19 and 20-39 year old participants.

$${}^2ES_O = 0.12, ES_R = 0.41$$

$${}^3ES_O = 0.45, ES_R = 1.50$$

$${}^4ES_O = 1.16, ES_R = 3.50$$

$${}^5ES_O = 1.54; ES_R = 4.35$$

⁶We chose the pre-treatment SD of the groups as denominator for Glass's Δ concerning the within-subjects comparisons.

$${}^7ES_O = 3.70; ES_R = 3.12$$

$${}^8ES_O = 4.47; ES_R = 3.55$$

$${}^9ES_O = 0.19; ES_R = 0.63$$

1 Table 1

2 *d2-R CP Means across Treatments and Measuring Times*

Treatments	Measuring Times	
	Pre	Post
Mindfulness	95.32 (12.40)	105.79 (11.33)
Identification	98.11 (8.82)	107.89 (10.70)
Control	94.00 (10.59)	95.74 (9.05)

3 *Note.* Parameters given in the cells are d2 Test of Attention-Revision concentration performance

4 (d2-R CP) means (standard deviations).

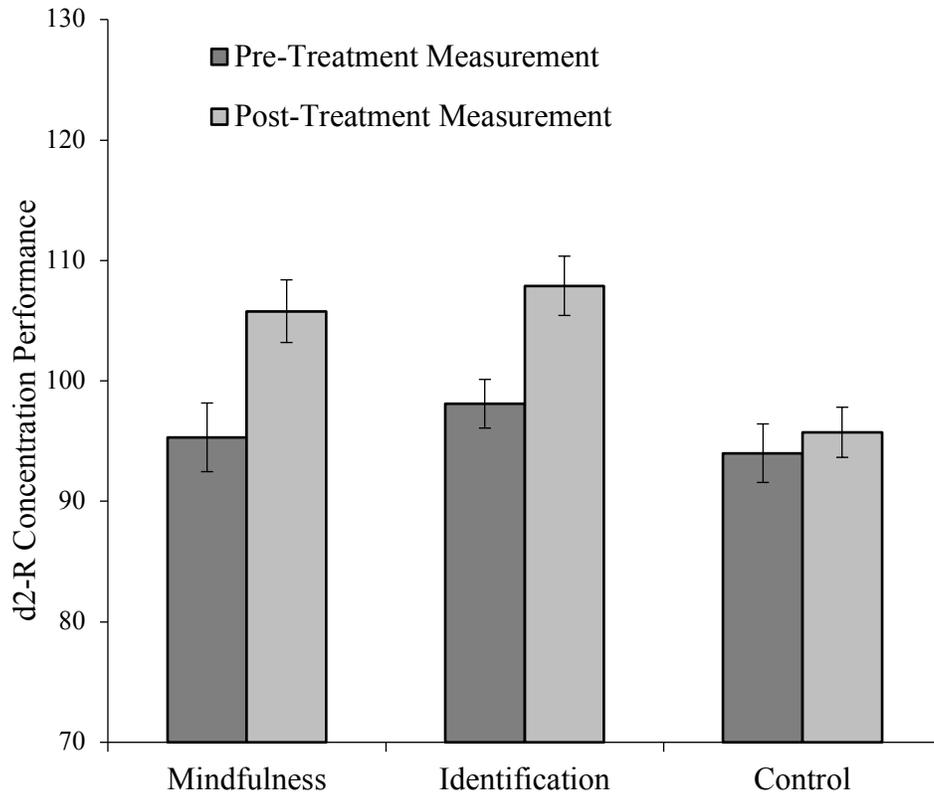
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- 1 Table 2
 2 *Pearson's Correlation Coefficients between FPI-R Dimensions and d2-R CP Improvements*
 3 *across Treatments*

FPI-R dimensions	d2-R CP Improvement		
	Mindfulness	Identification	Control
Life Satisfaction	.35	.02	-.24
Social Orientation	.15	.44	-.21
Achievement Orientation	-.02	-.45	.01
Inhibitedness	-.33	.22	-.40
Excitability	-.13	-.06	-.30
Aggressiveness	.26	-.20	.14
Strain	-.40	.08	.03
Somatic Complaints	-.50	.15	.07
Health Concerns	.04	.19	.10
Frankness	-.05	-.03	< -.01
Extraversion	.68	-.09	-.08
Emotionality	-.38	-.01	.10

- 4 *Note.* Pearson's $r \geq .50$ are in boldface. FPI-R = Freiburger Personality Inventory-Revised; d2-R
 5 CP = d2 Test of Attention-Revision concentration performance.



1

2 *Figure 1.* d2 Test of Attention-Revision concentration performance (d2-R CP) as a function of
 3 treatment (mindfulness, identification, control) and measuring time (pre, post). *Note.* Error bars
 4 indicate standard errors of the mean.

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Appendix A

Logos of Lichtblick



6.2. Peacefully Changing the World

Isemann, S. D., Walther, E., Solfrank, S., & Wilbertz, F. (2019). Peacefully changing the world: Political system support facilitates peaceful, but prevents violent protest orientation among school students. *Peace and Conflict: Journal of Peace Psychology*. Advance online publication. <http://dx.doi.org/10.1037/pac0000388>

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Peacefully Changing the World:
Political System Support Facilitates Peaceful, But Prevents Violent Protest
Orientation Among School Students

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1 **Peacefully Changing the World: Political System Support Facilitates Peaceful, But**
2 **Prevents Violent Protest Orientation Among School Students**

3 Despite common believes branding young people as apolitical, recent events have
4 impressively shown otherwise: From the *March for Our Lives*, the demonstrations against gun
5 violence, to the *School Strike for Climate*, an international movement of pupils against global
6 warming, it becomes very clear that young people deeply care about political issues. In the
7 present research we address the reason why young people predominately choose peaceful instead
8 of violent ways to express their grievances.

9 Based on Gurr's (1970) seminal work, *Why Men Rebel*, highlighting the importance of
10 relative deprivation (RD) in this context, RD can be considered as the discrepancy between
11 individual's expectations on the one hand, and social reality – social comparisons with other
12 persons (egoistic RD) or groups (fraternal RD) (Runciman, 1966) – on the other hand as a
13 potential source of protest. Specifying this idea, Higgins (1987) identified discrepancies between
14 one's current state (*actual self*) and intended states, *ideal self* (e.g., dreams or aspirations) or a
15 normatively prescribed *ought self* (e.g., responsibilities or obligations), as an important
16 motivational basis for action. Although RD has been shown to be a core predictor of protest (van
17 Zomeren, Postmes, & Spears, 2008) facing the different social consequences, it seems very
18 important to distinguish peaceful forms (e.g., authorized demonstrations) from delinquent forms
19 (e.g., like vandalism or violence) (Sabucedo & Arce, 1991) to express grievances.

20 **System Support as a Moderator**

21 Regarding this question, previous research (e.g., Saab, Spears, Tausch, & Sasse, 2016)
22 assumed that “people will consider aggressive collective action as long as they do not have high
23 hopes that peaceful strategies can help resolve an ongoing perceived social injustice” (p. 541).

1 Tausch et al. (2011) found that illegal forms were associated with low political efficacy (faith
2 and trust in government and the belief that citizens are able to influence political affairs), while
3 peaceful forms were associated with high political efficacy. Going beyond this concept, Easton
4 (1965) highlights the overall “we-feeling” (p. 185), shared values and norms as well as
5 institutions and authorities as equally important aspects of a political system, hence, as possible
6 moderating influences. In the present paper we therefore introduce political system support as an
7 attachment to the political system, which includes the evaluation of shared values (e.g., welfare
8 state), different institutions (e.g., government, police, courts), and authorities (e.g., politicians) as
9 a predictor of protest.

10 Based on past research, we assumed that school students experiencing relative
11 deprivation show higher protest orientation. However, students with high political system
12 support (compared to those with low support) should prefer peaceful over violent forms.
13 Exploratively, we also investigated the relationship between relative deprivation and self-
14 discrepancies.

15 Method

16 Participants and Procedure

17 145 students (76 female, 69 male, age $M = 17.7$ years, range 16-20 years) from a German
18 comprehensive school were investigated. Participants conducted the paper and pencil version of
19 the questionnaires in their class-rooms on two consecutive days.

20 Materials

21 **RD.** The RD scale consists of 16 items (rated on 6-point Likert Scales) targeting egoistic
22 (8 items, i.e., “In comparison to others: Do you feel as a person who is deprived?”) and fraternal
23 RD (8 items, i.e., “In comparison to other schools: Are students of your school respected and

1 treated as other students?”). One item of the fraternal RD subscale was excluded due to poor
2 reliability. After the exclusion, the scale (.73) shows good reliability (Cronbach’s alpha).

3 **Political system support.** The political system support scale consisted of 17 items (rated
4 on 6-point Likert Scales) and shows good reliability (Cronbach’s alpha = .72). Based on the
5 definitions of political system support (see Easton, 1965), the scale consists of items targeting
6 branches of the regime (i.e., “Police officers often abuse their power.”), authorities (i.e., “In
7 Germany politicians only care about getting elected.”), and overall political community (i.e.,
8 “There are too many people abusing the welfare state.”).

9 **Self-discrepancies.** The self-discrepancies scale consisted of 15 adjectives (rated on 6-
10 point Likert Scales, i.e., “confident”). Every of the 15 adjectives has to be rated three times:
11 Actual-self (“I am ...”), ideal-self (“I want to be ...”), and ought-self (“I should be ...”). The
12 three scales actual-self (.86), ideal-self (.80), and ought-self (.76) show good reliability
13 (Cronbach’s alpha). Two scores were then calculated: Actual-ideal ($M_{\text{ideal-self}} - M_{\text{actual-self}}$) and
14 actual-ought self-discrepancies ($M_{\text{ought-self}} - M_{\text{actual-self}}$).

15 **Peaceful protest orientation.** Participants were to rate three different peaceful protest
16 forms: petition, approved demonstration, and civil disobedience. For each protest form attitude
17 (6-point Likert Scale, i.e., “I can relate to such behavior.”), intention (6-point Likert Scale, i.e., “I
18 can imagine taking part in it.”), behavior (6-point Likert Scale, i.e., “I have taken part in it in the
19 past.”), and implicit attitude (“Please estimate: Out of a group of 10 persons, how many would
20 be willing to show such a behavior?”) was measured. Because of different scale ranges, all items
21 were z-standardized. The scale shows good reliability (Cronbach’s alpha = .81).

22 **Violent protest orientation.** Participants were asked to rate three different violent protest
23 forms: violent demonstration, instrumental violence, and hostile violence. Measurement and

1 calculation of the scale was identical to the peaceful protest orientation, showing equally good
2 reliability (Cronbach's alpha = .79).

3 **Results**

4 **Relations Between the Constructs**

5 We found a significant negative correlation between RD and political system support ($r =$
6 $-.28, p = .001$) but no correlation with peaceful ($p = .294$) nor violent ($p = .138$) protest
7 orientation (see Table 1). As expected there was a significant positive correlation between RD
8 and self-discrepancies (actual-ideal: $r = .42, p < .001$; actual-ought: $r = .46, p < .001$).

9
10 Table 1

11 *Pearson's Correlation Coefficients between the Constructs*

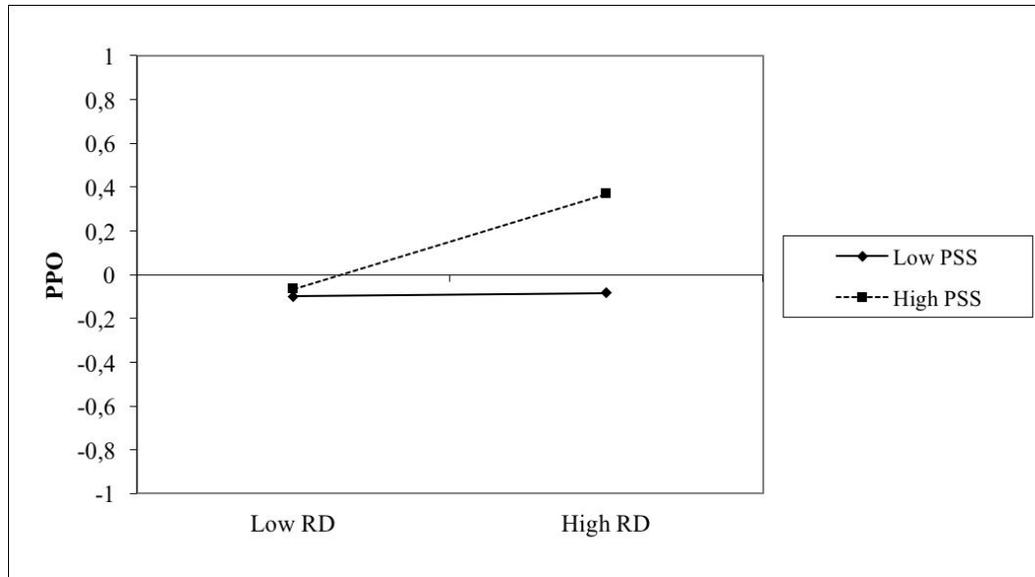
Constructs	1	2	3	4	5	6
1. Relative deprivation	–					
2. Political system support	-.28**	–				
3. Peaceful protest orientation	.09	.14	–			
4. Violent protest orientation	.12	-.09	.14	–		
5. Actual-ideal self-discrepancies	.42**	-.16	.03	-.09	–	
6. Actual-ought self-discrepancies	.46**	-.13	.10	<-.01	.69**	–

12 *Note.* $N = 145$; * $p < .05$, ** $p \leq .001$.

14 **Predicting Peaceful Protest Orientation**

15 A linear regression (all factors z-standardized) was calculated. Sex and age were not
16 predictive and therefore excluded. A significant regression equation ($F(3, 142) = 3.42, p = .019$)

1 revealed significant main effects of RD ($b = .20$; $p = .026$) and political system support ($b = .22$;
 2 $p = .013$) as well as a significant interaction effect ($b = .18$; $p = .036$). We conducted a simple
 3 slopes analysis (with RD as an independent variable and political system support as moderator; +
 4 1 SD , simple slope = $.22$, $p = .010$) revealing high peaceful protest orientation especially when
 5 both, RD and political system support are high (see Figure 1).



6
 7
 8 *Figure 1.* Political system support (PSS) as moderator between RD and peaceful protest
 9 orientation (PPO).

10 **Predicting Violent Protest Orientation**

11 Violent protest orientation did not meet the assumptions (skewness = 3.54, $SE_{skewness} =$
 12 $.20$) necessary for a linear regression. We therefore performed a median split and conducted a
 13 binary logistic regression (all predictors z-standardized). RD and sex were not predictive, hence,
 14 excluded from further analysis. The final regression equation ($\chi^2(2) = 12.52$, $p = .002$,
 15 Nagelkerke's pseudo $R^2 = .11$) revealed significant main effects for political system support ($b =$
 16 $-.43$, $p = .019$, $Exp(B) = .65$). A further effect resulted for age ($b = .49$, $p = .008$, $Exp(B) = 1.62$).

17

1 on increasing loss of confidence in the political system. Future studies should try to illuminate
2 this process – preferably in dynamic and interactive ways (e.g., interactive games).

3 Moreover, our results suggest an association between RD and self-discrepancies.

4 However, future experimental research is necessary in order to disentangle the processes behind
5 this correlational finding. Finally, our research suggests that strengthen peoples’ political system
6 support like enhancing participation possibilities or democracy education might be effective
7 against violent protest tendencies.

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6.3 Which Side Are You On?

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Which Side Are You On?

Political Loyalty as a Core Concept of Engagement

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(submitted July 10 2019, 12905 words, 10 tables, 7 figures)

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1 **Abstract**

2 The lack of loyalty into politics and government is often identified as a major issue contributing
3 to democracy crises and the rising of populism in many parts of the world. However, the
4 prevailing of loyalty is often related to constructive political participation and peaceful strive for
5 change. In five studies using diverse samples across the political left-right spectrum, we show
6 that political loyalty is a reliable and valid construct predicting the *specific* form (violent vs.
7 peaceful) of political engagement people chose to express their grievances. Political loyalty was
8 defined as a two-factor concept consisting of a) emotional attachment to the political system and
9 b) internalization of democratic values. Study 1 ($N = 506$) supported the theoretically driven
10 factor structure of the loyalty concept and shows the concept's relation to party identification.
11 Study 2 ($N = 319$) provides convergent as well as divergent validity. Study 3 ($N = 120$) further
12 advanced the validity of the loyalty concept by comparing right-wing and left-wing political
13 groups with respect to their particular factor profiles. Study 4 (laboratory experiment, $N = 63$)
14 showed that emotional attachment works as a facilitating factor for peaceful, and protective
15 factor against radical protest intentions. In Study 5 (laboratory experiment, $N = 98$), these
16 findings were replicated and protest intentions linked with protest action. The importance and
17 utility of the loyalty concept for the democratic functioning in politically turbulent ages is
18 discussed.

19

20 *Keywords:* political loyalty, political engagement, party identification, political groups

21

Which Side Are You On?

Political Loyalty as a Core Concept of Civic Engagement

When French President Emmanuel Macron announced a raise in fuel prices in 2018 he provoked a storm of collective anti-government movement that were portrayed by some media as the most violent protests in France since 1968. The *Mouvement des Gilets Jaunes* (yellow vest movement) eagerly spiraled into violent protests including rioting, vandalism, and looting among many other forms of protest. The yellow vests soon became an internationally recognized symbol of resistance against the government's tax reform in particular, and the government in general. The movement's main goals were lower fuel prices, minimum wage increase, and ultimately, Emmanuel Macron's resignation as the President of France. The *Gilets Jaunes* illustrate that dissatisfaction with the government, especially the abandoned hope that politics will solve people's problem, is central for the understanding of social and political uprising. In France, polls in December 2018 (see Raulin, 2019) showed that the majority (85 %) of French citizens lost trust into politics.

This increasing lack of trust, commitment, and attachment (*loyalty* henceforth) into politics and government is often identified as a major issue contributing to democracy crises and the rising of populism in many parts of the world (Algan, Guriev, Papaioannou, & Passari, 2017; Crozier, Huntington, & Watanuki, 1975; Federico, Williams, & Vitriol, 2018; Foster & Frieden, 2017; Kotroyannos, & Mavrozacharakis, 2018; Mudde, 2013). In many states politics suffer from perceived de-legitimization, for instance, in Europe regarding the EU, in which the parliament is indeed elected but suffers from a lack of power compared to the not directly-elected institutions (i.e., the European commission, and the European council). As a symptom of this crisis, many believe that it makes little difference which party is in power (e.g., Moeller &

1 de Vreese, 2013). But it is also well known in political science that prevailing trust and
2 confidence into the political institutions is an important precondition of constructive political
3 engagement and peaceful strivings for societal change (Cichocka, Górska, Jost, Sutton, &
4 Bilewicz, 2018). Hence, it is of highest importance to understand people's attachment to their
5 political leaders regarding democratic functioning. In this article, we introduce and investigate
6 the concept of political loyalty as a concept referring to people's trust and attachment towards
7 their political leaders as a major factor determining different forms of political engagement and –
8 ultimately – whether people engage at all.

9 **Successful Democracies Require Active Citizens**

10 From civil rights movement, to the Gilets Jaunes, to Fridays for Future, politically active
11 citizens represent the very essence of democracy (see also Almond & Verba, 1963; De
12 Tocqueville, 1863; Putnam, 1993, 2000). This is because political engagement, that is, actions
13 individuals take to influence the course of politics, is used by citizens to communicate grievances
14 to their representatives (Parvin & Saunders, 2018), to experience power (Beaumont, 2010), and
15 to strive for societal change (Camino & Zeldin, 2002). On the one hand, democracy, the *rule of*
16 *the people*, can historically be understood as the long quest for personal and political autonomy
17 and self-determination (Lakoff, 2018). On the other hand, dismantling of democracy goes often
18 along with the curtailment of democratic rights for many forms of participation, such as
19 prohibitions of assembly, or bans on demonstrations. Hence, an extreme case of absence of
20 democracy, totalitarianism, is best characterized by almost a full neglect of an individual's
21 agency and power (Arendt, 1951).

22 Today in many parts of the world democratic politics and governance rapidly change
23 finally resulting in an increasing number of illiberal democracies (Zakaria, 1997). Illiberal

1 democracies (often described as the rule of law instead the rule by law) hold in fact regular
2 election but lack such liberties as freedom of speech, or freedom of assembly, which makes
3 opposition difficult. But as the Gilets Jaunes movement suggests, even in states that are yet not
4 strongly affected by these illiberal influences, attachments to political parties and trust in
5 governance have eroded, and ultimately changed the way people choose to strive for social
6 change.

7 **Pathways to Political Engagement**

8 That individuals take action to improve their group's situation is a well-known
9 phenomenon (Kearns, Asal, Walsh, Federico & Lemieux, 2018; van Zomeren, Spears, Fischer,
10 & Leach, 2004; Wright, Taylor, & Moghaddam, 1990). Based on meta-analysis, van Zomeren,
11 Postmes, and Spears (2008) identified three major intertwined research lines that predict citizens'
12 political efforts: perceived injustice, a sense of social identity, and perceived political efficacy.

13 Notwithstanding that political engagement can be seen as a response to injustice (van
14 Zomeren et al., 2008), researchers (e.g., Gurr, 1970; Merton, 1957; Pettigrew, 1967; Runciman,
15 1966; Williams, 1975) soon realized that feelings of injustice do not derive merely from
16 objective living conditions but rather social comparison processes in a phenomenon known as
17 relative deprivation. According to Runciman (1966), relative deprivation can be understood as
18 the discrepancy between one's expectations and social reality based on social comparisons with
19 other persons (egoistic relative deprivation) or groups (fraternal relative deprivation).

20 Complementary from the perspective of social identity theory (SIT; Tajfel & Turner,
21 1986), political engagement occurs when individuals identify themselves with a low status
22 ingroup and the group's status in comparison to others is perceived as illegitimate and unstable
23 (Ellemers, 1993; Tajfel, 1978). Simon, Stürmer, and colleagues (e.g., Simon et al., 1998; Simon

1 & Klandermans, 2001; Stürmer & Simon, 2009) argue that political movements offer individuals
2 in need of self-esteem, an opportunity for a strong *politicized collective identity*. Political
3 movements, through the context of power struggle and social change, transform a person's social
4 identification into a much more argentic one (Drury & Reicher, 1999). Through the identification
5 with a movement, needs and goals of the ingroup become even more self-defining, resulting in
6 an *inner obligation* to actively participate (Stürmer et al., 2003).

7 Finally, resource mobilization theorists (e.g., Curti, 2008; Klandermans, 1984; McCarthy
8 & Zald, 1977; Tarrow, 1994) like Klandermans (1984) add that “the willingness to participate in
9 a social movement is a function of the perceived costs and benefits of participation” (p.583). In
10 other words, people engage in politics as long as they believe that it is gainful. This is why *group*
11 *efficacy*, the shared belief that one's group can resolve its grievances through a unified effort
12 (e.g., Mummendey, Kessler, Klink, & Mielke, 1999), is another important factor when it comes
13 to prediction of political behavior (see also Folger, 1987; Hornsey et al., 2006; Kelly &
14 Breinlinger, 1996).

15 **Predicting Different Forms of Political Engagement**

16 Despite the contributions of these lines of research in order to explain political
17 engagement, these accounts remain silent regarding the question of *which way* people choose to
18 participate. In other words, they do not address whether people would use peaceful or more
19 violent forms to express grievances. However, this distinction is of highest importance because it
20 defines the demarcation line between people strive for change within a society's normative
21 system and people actually fight the system. Ultimately, it defines the difference between
22 respectable engaged citizens and alienated radicals.

1 A tentative answer to the question which construct might predict the differences between
2 peaceful vs. violent forms of protest comes from the notion that peaceful strategies are pursued
3 as long as people hope that those strategies are effective (Cichocka et al., 2018; Isemann,
4 Walther, Solfrank, & Wilbertz, 2019). In this respect, non-aggressive and aggressive forms of
5 political might be poles of a continuum referring to coping mechanisms in the face of grievances.
6 Hence, Sprinzak (1991) describes political radicalization as a process of delegitimation, a
7 stepwise transformation from peaceful to violent forms of political actions based on increasing
8 loss of confidence in the political system.

9 Indeed, empirical evidence strongly support this idea that individuals trusting in or
10 legitimizing their political system are more likely to engage in benevolent forms of political
11 engagement (e.g., Fennema & Tillie, 2001; Muller, Jukam, & Seligson, 1982; Schatz, Staub, &
12 Lavine, 1999) and that people detached from the political system tend to violent forms of protest
13 (e.g., Knigge, 1998; Sloodman & Tillie, 2006; Söderlund & Kestilä-Kekkonen, 2009). Tausch et
14 al. (2011), for example, demonstrated that political efficacy is positively related to peaceful and
15 negatively related to violent forms of political action. Additionally, a recent study conducted by
16 Cichocka et al. (2018) show a curvilinear relationship between confidence in the social system
17 and normative, peaceful political engagement. The authors conclude that system confidence – to
18 some degree – stimulate political engagement within the norms of the system. In contrast, a
19 study by Doosje, Loseman, and van den Bos (2013) found that perceived illegitimacy of
20 authorities, perceived distance to others, and a feeling of disconnection from society are strong
21 predictors for favorable attitudes toward the use of violence for political purposes among a
22 sample of Islamic youth in the Netherlands.

1 From the perspective of system justification theory (e.g., Hennes, Nam, Stern, & Jost,
2 2012; Jost & Banaji, 1994; Jost, Banaji, & Nosek, 2004; Jost, Ledgerwood, & Hardin, 2008; Jost
3 & van der Toorn, 2012), people are motivated to support their political system as long as it helps
4 to manage fundamental human needs. In this respect, Hennes et al. (2012) found strong
5 individual differences in the extent to which people justify their system. Based on this work and
6 work on national attachment (e.g., Schatz, Staub, & Lavine, 1999) or public trust (e.g., Tyler,
7 2011) we try to advance the knowledge regarding predictors of different forms of political
8 behavior.

9 **Political Loyalty**

10 Taking into account recent discussions (e.g., Solinger, van Olffen, & Roe, 2008), we
11 argue that a person's attachment towards abstract organized groups (e.g., institutions,
12 organizations, government) can be best understood as an attitude. Hence, we define political
13 loyalty as an attitude towards the government and politics, consisting of an affective facet,
14 *emotional attachment* (EMA), and a cognitive facet, *internalization of democratic values*
15 (INDEV).

16 **EMA.** EMA refers to feelings of affective attachment towards the socio-political context.
17 In previous research those affective sensations were often described as patriotic and nationalistic
18 sentiments (e.g., Adorno, Frenkel-Brunswik, Levinson, & Sanford, 1950; Bar-Tal, 1993;
19 Kosterman & Feshbach, 1989; Knudsen, 1997; Schatz & Staub, 1997; Schatz et al., 1999) and as
20 feelings of trust (e.g., Fennema & Tillie, 2001; Weatherford, 1992). Nationalism can be defined
21 as a feeling of pride based on one's believe that his or her country is superior to others
22 (Druckman, 1994; Kosterman & Feshbach, 1989). Patriotism, more specifically constitutional
23 patriotism, is often defined as a positive emotional "attachment to national values" (Adorno et

1 al., 1950, p. 107), but also to democratic principles and humanistic values (see Habermas, 1990;
2 Schatz & Staub, 1997; Staub, 1997). We identified and included trust as a third dimension to
3 EMA. In their well-known model, Mayer, Davis, and Schoorman (1995) define organizational
4 trust as the willingness to be vulnerable to an organized group in expectation that it will perform
5 an important action to the trustor. Hence, trust constitutes an important antecedent of legitimacy
6 (e.g., Tyler, 2011; Weatherford, 1992) as well as commitment (e.g., Dirks & Ferrin, 2001;
7 Geyskens, Steenkamp, Scheer, & Kumar, 1996), and was found to be associated with political
8 behavior (e.g., Fennema & Tillie, 2001).

9 **INDEV.** Different to EMA that refers to feelings of attachment, INDEV refers to the
10 internalization of norms and values constitutional of democracies. There is evidence (e.g.,
11 Fielding, Terry, Masser, & Hogg, 2008; Giannakakis & Fritsche, 2010; Stollberg, Fritsche, &
12 Jonas, 2017) that group norms play a crucial role when it comes to predict political behavior,
13 especially in times of crises. Stollberg et al. (2017), for example, demonstrate that perceived
14 terrorist threat predicted intentions to support anti-right-wing protests but only for those who are
15 in contact with anti-right-wing norms. Federico and Ekstrom (2018) advanced these
16 considerations and highlighted the role of political-identity centrality, that is, “the extent that
17 one’s political preferences are central to the self-concept” (p. 901), as an important factor
18 moderating the relationship between needs and political preferences. Based on Kosterman and
19 Feshbach (1989) identifying the internalization of civil liberty as a factor of attachment, we refer
20 to democratic norms and values set down in the constitutions as well as the Universal
21 Declaration of Human Rights.

22 Based on constitutional law literature (e.g., Guhr, Moshtaghi, & Knust Rassekh Afshar,
23 2006; Jackson, 200; Shulztiner & Carmi, 2014; Stone, 2005, 2010), we focused on three facets,

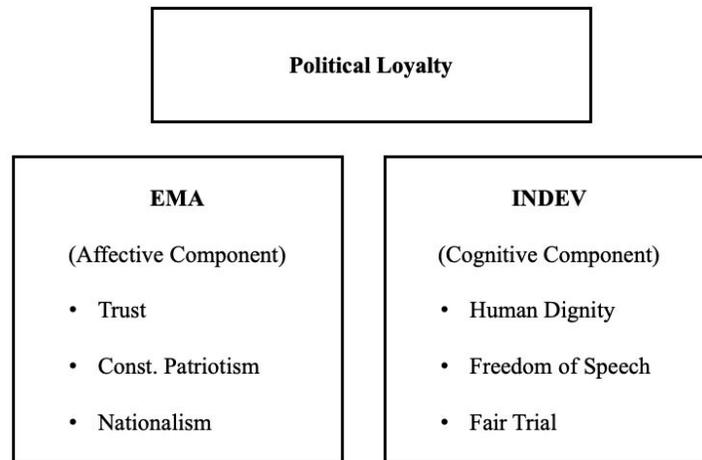
1 the inviolability of human dignity, the freedom of speech, and the right to a fair trial as the main
2 aspects constituting the factor INDEV. “Human dignity became a central concept in
3 contemporary constitutionalism following World War II and subsequent to its inclusion in the
4 preambles to the United Nations Charter (1945) and the Universal Declaration of Human Rights
5 (1948)” (Shulztiner & Carmi, 2014, p. 461). The constitutional freedom of speech is among the
6 most protected of constitutional rights, reaching from democracies in Western Europe, to Eastern
7 Europe, Asia, South America, Africa, and Australia (Stone, 2010). Finally, the right to a fair trial
8 is “one of the most fundamental guarantees for the respect of democracy and the rule of law and
9 thus represents a standard by which a state’s commitment of democracy and the rule of law is
10 measured” (Koprivica, 2018, p. 3).

11 **The Present Research**

12 In the present paper we argue that political loyalty is a core variable of political behavior
13 predicting different forms of political engagement. In order to introduce this concept, we first
14 assessed the reliability, validity, and utility of political loyalty in Studies 1 to 3. Subsequently, in
15 Studies 4 to 5, we demonstrate that the way people actively strive for social change highly
16 depends on political loyalty, even when well-known political action factors, such as perceived
17 injustice or social identity are controlled.

18 **Study 1**

19 The aim of Study 1 was to validate the theoretically derived factor structure of political
20 loyalty (see Figure 1) towards the political system, using exploratory as well as confirmatory
21 factor analysis. The complete questionnaire can be found in Table 1.



1
2 *Figure 1.* Structure of the loyalty concept.

3 **Construction of EMA**

4 As outlined above, we identified three dimensions of an individual's emotional
5 attachment towards a political system: trust, constitutional patriotism, and nationalism.
6 Regarding trust, we generated items based on the *model of organizational trust* by Mayer and
7 colleagues (Mayer et al., 1995; Mayer & Davis, 1999). With respect to nationalism and
8 constitutional patriotism, items were generated based on diverse concepts in the literature (e.g.,
9 Birnbreier-Stahlberger & Bonath, 1997; Blank & Schmidt, 1997; DeLamater, Katz, & Kelman,
10 1969; Gallenmüller & Wakenhut, 1992; Kelman & Hamilton, 1989; Kosterman & Feshbach,
11 1989; Mummendey, 1992; Noelle-Neumann & Köcher, 1987; Seiler, Maes, & Schmitt, 1999;
12 Staub, 1997; Sullivan, Fried, & Dietz, 1992), ranging from international concepts like
13 *constructive and blind patriotism* by Staub (1997), to German-specific concepts like *attitudes*
14 *toward the German nation* by Birnbreier-Stahlberger and Bonath (1997). This item pool was
15 then pretested with the help of 183 participants (111 females, 69 males, three unknown gender;
16 M age = 29.88 years, SD = 12.94) and items for each dimension were selected with regards to
17 their distributions and correlations.

- 1 Table 1
- 2 *Political Loyalty Questionnaire*

EMA

Trust

- “All in all, you can trust the state.” (T1)
- “The state is reliable.” (T2)
- “By and large, the state means well to us.” (T3)
- “By and large, the state can be relied upon.” (T4)
- “All in all, the state tries to make fair decisions.” (T5)
- “The state stands up for its citizens.” (T6)
- “The state is striving for a better future for all of us.” (T7)
- “The state will overcome future difficulties.” (T8)
-

Constitutional Patriotism

- “I greatly appreciate the fundamental rights in our Constitution.” (P1)
- “I feel grateful for the rights the German constitution guarantees me.” (P3)
- “I am grateful that the constitution protects us from state arbitrariness.” (P4)
- “I am happy to live in a state with legal certainty.” (P5)
- “I'm proud of the German constitution.” (P6)
- “I feel a sense of gratitude for the co-determination opportunities in Germany.” (P7)
- “I am proud of our German democracy.” (P8)
-

Nationalism

- “I'm happy when I see the German flag.” (N1)
- “It saddens me that so few Germans are proud of their nation.” (N2)
- “When someone insults our German nation, I feel personally insulted.” (N3)
- “I feel emotionally attached to a strong nation state.” (N4)
- “I am proud to be a German.” (N5)
-

(continued)

Table 1 (continued)

INDEV

Human Dignity
“In order to ensure security, the right to human dignity may be restricted in an urgent situation.” (HD1, inverted)
“The state should do everything possible to protect the nation, if necessary at the expense of human dignity.” (HD2, inverted)
„State security sometimes takes priority over human dignity of the individual.“ (HD3, inverted)
„Human dignity is tangible if thereby serious crimes can be prevented. (HD4, inverted)
“Even in serious crises, the state must protect human dignity.” (HD5)
“Foreigners also have the right for a dignified life in Germany.” (HD6)
Freedom of Speech
“In the future, the state must control more strictly which groups are allowed to publish texts and which are not.” (FS1, inverted)
“The state should be allowed to ban texts of certain political groups in advance.” (FS2, inverted)
“The state should be able to review the publications of some political groups in advance.” (FS3, inverted)
“Some groups should be banned from demonstrating.” (FS4, inverted)
“If it is politically appropriate, some satirical contributions may be restricted.” (FS5, inverted)
Fair Trial
“Even serious offenders should have the right to be heard in court.” (FT1)
“Even brutal murderers deserve a fair trial.” (FT2)
“Everyone has the right to an attorney, even if he has committed a terrible crime.” (FT3)
„Child molesters should be imprisoned straightaway without trial.“ (FT4, inverted)
„In the case of serious crimes such as rape, the victim should decide how to punish the offender.” (FT5, inverted)
“If there are doubts about his guilt, a perpetrator should be acquitted.” (FT6)

- 1 *Note.* The final version of EMA unfortunately does not contain inverted items. However, some authors (e.g., Zhang,
- 2 Noor, & Savalei, 2016) argue that the use of inverted items in Likert scales has some serious disadvantages, for
- 3 instance because it affects the factor structure of scales. Hence, we refrained from generating new inverted items.

1 **Construction of INDEV**

2 Based on findings of Kosterman and Feshbach (1989) and comparative constitutional law
3 literature (e.g., Guhr et al., 2006; Harvey, 2018; Jackson, 2004; Shulztiner & Carmi, 2014;
4 Stone, 2005, 2010), we generated items on the following values: inviolability of human dignity,
5 freedom of speech, and the right to a fair trial. Items were generated based on the idea of whether
6 and to what degree people are willing to give up these fundamental principles (e.g., “Human
7 dignity is violable if serious crimes can thereby be prevented”). An item pool was pretest with
8 the help of 194 participants (127 females, 63 males, four unknown gender; *M* age = 28.63 years,
9 *SD* = 16.11) and items for each dimension were selected with regards to their distributions and
10 correlations.

11 **Political Loyalty Across Political Orientation and Party Identification**

12 For further validation, we explored the nomological network of political loyalty, in this
13 case, how the scales perform across political orientation. We hypothesize that political loyalty is
14 strongest among individuals moderate in political orientation. Furthermore, we explored whether
15 one’s party identification can be predicted through specific characteristics of political loyalty,
16 thus, political loyalty profiles.

17 **Method**

18 **Participants and procedure.** Data were collected via Questback EFS Survey through the
19 e-mail distribution list of a large German University and social networks (e.g., Facebook). All
20 items were presented in German. From originally 618 participants 112 were excluded because
21 they had already participated in one of the pre-tests or were not German citizens. Hence, the
22 following analysis are based on the remaining 506 participants (315 females, 185 males, six not
23 reported gender; *M* age = 28.41 years, *SD* = 11.30; 478 German citizenship only, 28 dual

1 citizenship; 336 students, 137 employed, five unemployed, five pupils, three apprenticeships, 20
2 did not report profession or education).

3 **Materials.**

4 ***Political loyalty.*** The proposed political loyalty questionnaire consisted of 37 items and
5 two main scales: EMA and INDEV. The overall questionnaire shows good reliability with
6 Cronbach's $\alpha = .88$.

7 *EMA.* The scale consists of 20 items (rated on six-point Likert scales) with the three
8 subscales: Trust (eight items; e.g., "Overall, you can rely on the nation", "The nation will
9 overcome future difficulties"), constitutional patriotism (seven items; e.g., "I am proud of the
10 German constitution", "I feel gratitude for the rights granted in the German constitution") and
11 nationalism (five items; e.g., "I am proud to be German", "I am glad when I see the German
12 flag"). The subscales – trust (.95), constitutional patriotism (.86), and nationalism (.89) – as well
13 as the EMA scale (.93) show very good reliability (Cronbach's α s).

14 *INDEV.* This consists of 17 items (rated on six-point Likert scales) constituted by three
15 subscales: Human dignity (six items; e.g., "Even in severe crisis the nation has to protect human
16 dignity", inverted: "Human dignity is violable if serious crimes can thereby be prevented"),
17 freedom of speech (five items; e.g., inverted: "Some groups should be forbidden to
18 demonstrate", inverted: "In the future, the nation has to check more strictly which groups are
19 allowed to publish texts and which are not"), fair trial (six items; e.g., "Even brutal murderers
20 deserve a fair trial", inverted: "Child molesters should be imprisoned directly without trial"). All
21 three subscales – human dignity (.84), freedom of speech (.83), and fair trial (.83) – as well as
22 the INDEV scale (.88) show very good reliability (Cronbach's α s).

1 **Political orientation.** The political orientation was assessed with two items (rated on
2 seven-point Likert scales): Participants indicated their political orientation on a left-right scale (1
3 = strongly left, 7 = strongly right) and liberal-conservative scale (1 = very liberal, 7 = very
4 conservative).

5 **Party identification.** Participants were asked to indicate the political party they most
6 identify with. They could choose from a list with the most popular German political parties
7 (Christian Democrats, Social Democrats, Liberals, Socialists, the Greens, AfD, or Pirate Party).
8 Additional response options were provided for those who do not identify with any party or with a
9 party not mentioned in the list.

10 **Results**

11 **Exploratory factor analysis.** First, the factorability of political loyalty questionnaire was
12 examined ($N = 506$). Each of the 37 items correlated at least .40 with at least one other item. The
13 Kaiser-Meyer-Olkin measure was .93 and Bartlett's test of sphericity was significant ($\chi^2(666) =$
14 $11388.46, p < .001$). The diagonals of the anti-image correlation matrix were all over .80 and the
15 communalities all above .30. Principal components analysis and oblimin rotation ($\text{delta} = 0$) was
16 used, indicating a six factors solution, which explains 64.39 % (trust = 24.81 %, constitutional
17 patriotism = 3.95 %, nationalism = 7.14 %, human dignity = 5.13 %, freedom of speech = 4.52
18 %, fair trial = 18.84 %) of the variance. Content wise, the six proposed factors (trust,
19 constitutional patriotism, nationalism, human dignity, freedom of speech, fair trial) suited the six
20 extracted factors. All items in this analysis had primary loadings over and cross-loading below
21 .40. Factor loadings and communalities for every item are presented in Table 2.

22

23

1 Table 2

2 *Exploratory Factor Analysis for 37 Items of the Political Loyalty Questionnaire (N = 506)*

Items	EMA			INDEV			Communi- nality
	Trust	Const. Patriotism	Nation- alism	Human Dignity	Freedom of Speech	Fair Trial	
T1	.90						.80
T2	.87						.76
T3	.85						.77
T4	.84						.78
T5	.84						.71
T6	.83						.73
T7	.77						.71
T8	.75						.62
P1		-.74					.68
P2		-.70					.64
P3		-.65					.51
P4		-.56					.52
P5		-.54					.57
P6		-.53					.55
P7		-.46					.71
N1			.84				.74
N2			.83				.69
N3			.82				.67
N4			.78				.73
N5			.78				.69

3 (continued)

4

5

6

7

1 Table 2 (continued)

Items	EMA			INDEV			Communi- nality
	Trust	Const. Patriotism	Nation- alism	Human Dignity	Freedom of Speech	Fair Trial	
HD1				.84			.76
HD2				.84			.76
HD3				.73			.57
HD4				.68			.62
HD5				.65			.56
HD6				.46			.48
FS1					-.87		.72
FS2					-.85		.74
FS3					-.80		.66
FS4					-.68		.53
FS5					-.54		.38
FT1						.83	.66
FT2						.83	.76
FT3						.82	.63
FT4						.75	.68
FT5						.55	.40
FT6						.47	.32

2 *Note.* Factor loadings < .4 are suppressed.

3 **Correlations between scale means of the political loyalty questionnaire.** We explored
 4 possible correlations between the different scales and subscales of the political loyalty
 5 questionnaire (see Table 3) and found positive correlations (Pearson) between the EMA scales
 6 trust (with constitutional patriotism: $r = .71, p < .001$; with nationalism: $r = .33, p < .001$),
 7 constitutional patriotism (with nationalism: $r = .34, p < .001$), and nationalism. We also obtained
 8 positive correlations between the INDEV scales human dignity (with freedom of speech: $r = .41,$

1 $p < .001$; with fair trial: $r = .40, p < .001$), freedom of speech (with fair trial: $r = .46, p < .001$),
 2 and fair trial. Interestingly, trust (with fair trial: $r = .15, p = .001$) and constitutional patriotism
 3 (with human dignity: $r = .10, p = .027$; with fair trial: $r = .21, p < .001$) correlated positively with
 4 some, while nationalism (with human dignity: $r = -.37, p < .001$; with freedom of speech: $r = -$
 5 $.25, p < .001$; with fair trial: $r = -.20, p < .001$) correlated negatively with all of the INDEV
 6 subscales.

7 Table 3

8 *Pearson's Correlation Coefficients Between Scale Means of the Political Loyalty Questionnaire*
 9 *(N = 506)*

Scales	1	2	3	4	5	6
1. Trust	–					
2. Const. Patriotism	.71**	–				
3. Nationalism	.33**	.34**	–			
4. Human Dignity	.06	.10*	-.37**	–		
5. Freedom of Speech	-.04	.01	-.25**	.41**	–	
6. Fair Trial	.15**	.21**	-.20**	.40**	.46**	–

10 *Note.* $N = 506$; * $p < .05$, ** $p \leq .001$.

11 **Confirmatory factor analysis.** In order to validate the theory-derived factor structure, a
 12 confirmatory factor analyses based on the maximum likelihood method was conducted via *Mplus*
 13 *7.11*. We tested whether trust, constitutional patriotism, and nationalism can be clustered into the
 14 latent variable EMA, and human dignity, freedom of speech, and fair trial into the latent variable
 15 INDEV. We used the independent subscales (each subscale as an independent factor) as baseline
 16 model for comparison. An overview of the coefficient estimates of the latent variables is given in
 17 Table 4. Additionally, the hypothesized two-factor structure is described graphically in Figure 2.
 18 As expected and in contrast to the six-factor baseline model (CFI = .84; RMSEA = .08; SRMR =

1 .19), the two-factor model (CFI = .90; RMSEA = .06; SRMR = .08) showed an acceptable model
 2 fit. Hence, in direct comparison, the two-factor model (AIC = 50.92; BIC = 51.42) demonstrates
 3 a better model fit over the baseline model (AIC = 51.63; BIC = 52.10). Interestingly, EMA and
 4 INDEV were only positively associated ($B = .46, p < .001$) when this relationship was adjusted
 5 for the negative link ($B = -.63, p < .001$) between nationalism and INDEV.

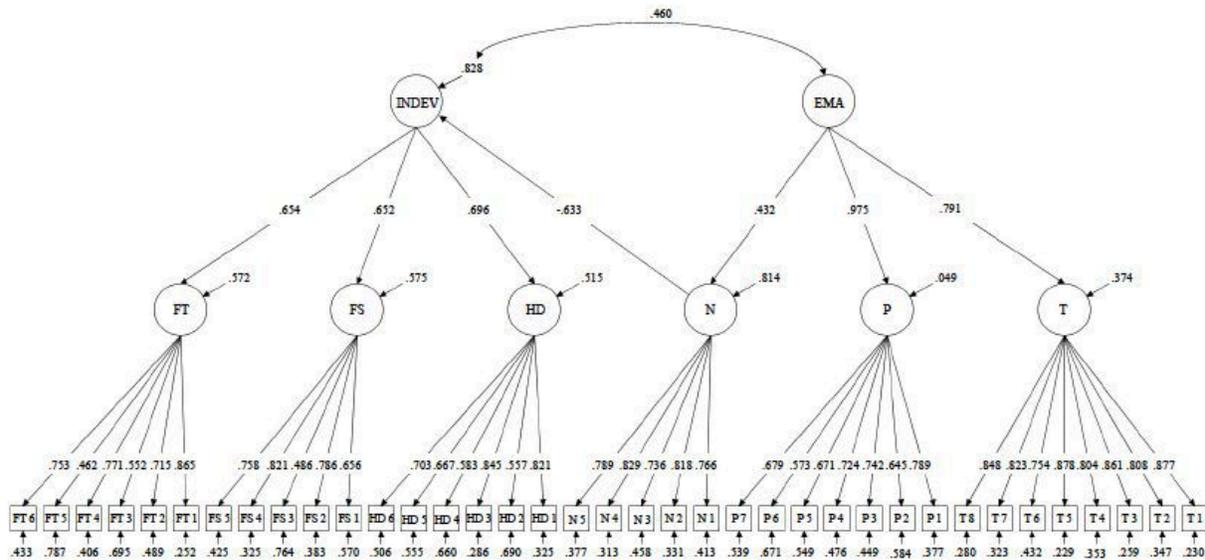
6 Table 4

7 *Coefficient Estimates of the Confirmatory Factor Analysis of the Political Loyalty Questionnaire*

8 ($N = 506$)

Scales	<i>Estimate</i>	<i>SE</i>	<i>p</i>
EMA			
by Trust	.79	.04	< .001
by Patriotism	.98	.04	< .001
by Nationalism	.43	.05	< .001
INDEV			
by Human Dignity	.70	.05	< .001
by Freedom of Speech	.65	.05	< .001
by Fair Trial	.65	.05	< .001
on Nationalism	-.63	.06	< .001
EMA			
with INDEV	.46	.06	< .001

9



1
 2 *Figure 2.* Confirmatory factor analysis of the political loyalty questionnaire. All coefficient
 3 estimates: $p < .001$; INDEV = internalization of democratic values, EMA = emotional
 4 attachment, FT = fair trial, FS = freedom of speech, HD = human dignity, N = nationalism, P =
 5 constitutional patriotism, T = trust; number of observations = 506; degrees of freedom = 119.

6 **Political loyalty across political orientation.** To validate the loyalty scale, we
 7 investigated its relation with participant’s political orientation. Therefore, different regression
 8 models were calculated. Left-right orientation predicted trust ($F(2, 503) = 27.81, p < .001, R^2 =$
 9 $.10; b_1 = 1.08, b_2 = -.13$) as well as constitutional patriotism ($F(2, 503) = 20.52, p < .001, R^2 =$
 10 $.08; b_1 = .81, b_2 = -.10$) best through a concave (quadratic) function, suggesting higher scale
 11 means in the middle of the left-right political orientation scale.

12 In contrast, nationalism ($F(1, 504) = 167.84, p < .001, R^2 = .25; b = .56$), human dignity
 13 ($F(1, 504) = 104.59, p < .001, R^2 = .17; b = -.37$), freedom of speech ($F(1, 504) = 34.07, p <$
 14 $.001, R^2 = .06; b = -.27$), and fair trial ($F(1, 504) = 16.67, p < .001, R^2 = .03; b = -.15$) showed
 15 linear trends across the left-right political orientation as a predictor.

1 Liberal-conservative orientation predicted fair trial ($F(2, 503) = 6.11, p = .002, R^2 = .02;$
 2 $b_1 = -.41, b_2 = .06$) best through a convex (quadratic) function, suggesting lower scale means in
 3 the middle of the liberal-conservative political orientation. Trust ($F(1, 504) = 21.39, p < .001, R^2$
 4 $= .04; b = .17$), constitutional patriotism ($F(1, 504) = 9.18, p = .003, R^2 = .02; b = .10$),
 5 nationalism ($F(1, 504) = 117.11, p < .001, R^2 = .19; b = .45$), human dignity ($F(1, 504) = 58.39,$
 6 $p < .001, R^2 = .10; b = -.25$), and freedom of speech ($F(1, 504) = 15.44, p < .001, R^2 = .03; b = -$
 7 $.16$) showed linear trends across the liberal-conservative orientation (predictor).

8 **Political loyalty profiles predict individual's party identification.** To enhance the
 9 validation and to strengthen the usability of the loyalty concept in political contexts, we explored
 10 whether the political loyalty questionnaire predicts participant's party identification (see
 11 Figure 3). For this purpose we calculated a logistic regression function for each party (0 = non-
 12 identification with, 1 = identification with) with the different subscales of the political loyalty
 13 questionnaire as predictors.

14 **Christian Democrats profile.** 65 out of 506 participants identified with Christian
 15 Democrats (CDU/CSU). Identification with this party can be described through a function ($\chi^2(3)$
 16 $= 85.63, p < .001, Nagelkerke R^2 = .29$) of high trust ($b = .90, p < .001, Exp(B) = 2.45$), high
 17 nationalism ($b = .62, p < .001, Exp(B) = 1.86$), and low freedom of speech ($b = -.49, p < .001,$
 18 $Exp(B) = .61$).

19 **Social Democrats profile.** 101 out of 506 participants identified with the Social
 20 Democrats (SPD). Identification with this party could be described through a function ($\chi^2(3) =$
 21 $28.92, p < .001, Nagelkerke R^2 = .09$) of high trust ($b = .60, p < .001, Exp(B) = 1.81$), high
 22 human dignity ($b = .34, p = .034, Exp(B) = 1.41$), and low fair trial ($b = -.42, p = .005, Exp(B) =$
 23 $.66$).

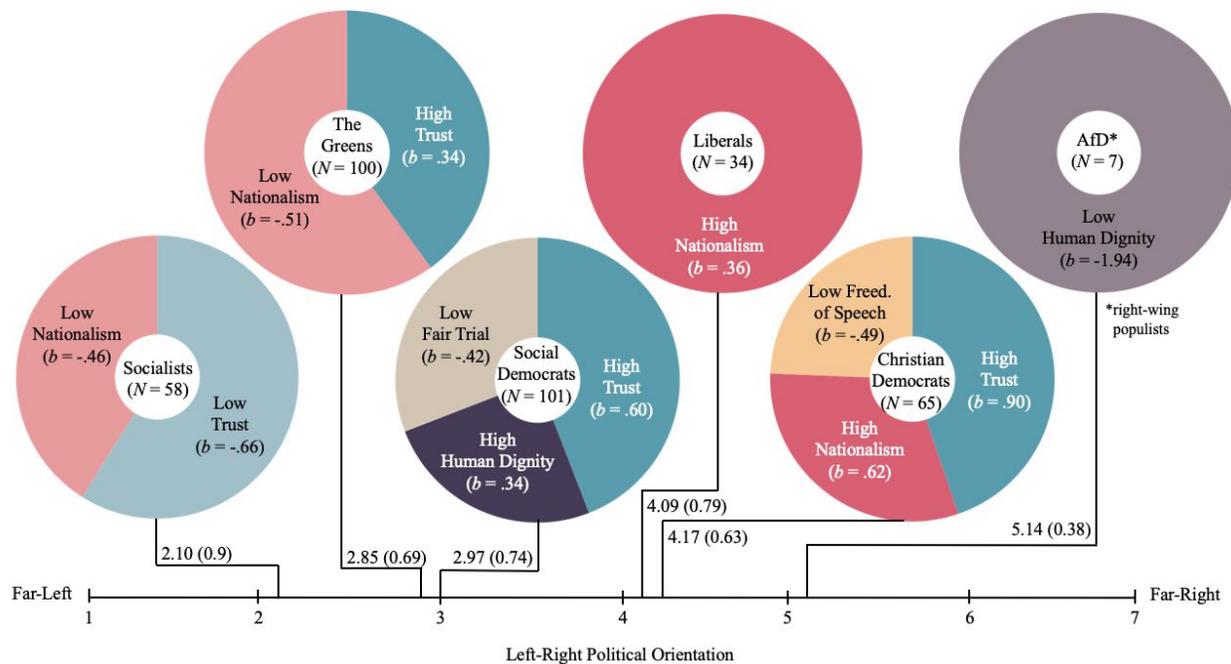


Figure 3. Political loyalty profiles for the German political parties. Beta weights of significant predictors and left-right political orientation (M , SD) in comparison.

Liberals profile. 34 out of 506 participants identified with the Liberals (FDP).

Identification with this party could be described through a function ($\chi^2(1) = 6.57, p = .010$, Nagelkerke $R^2 = .03$) of high nationalism ($b = .36, p = .010, Exp(B) = 1.43$).

Socialists profile. 58 out of 506 participants identified with the Socialists (Die Linke).

Identification with this party could be described through a function ($\chi^2(2) = 47.34, p < .001$, Nagelkerke $R^2 = .18$) of low trust ($b = -.66, p < .001, Exp(B) = .52$) and low nationalism ($b = -.46, p = .002, Exp(B) = .63$).

The Greens profile. 100 out of 506 participants identified with the Greens (Die Grünen).

Identification with this party could be described through a function ($\chi^2(2) = 23.70, p < .001$, Nagelkerke $R^2 = .07$) of high trust ($b = .34, p = .007, Exp(B) = 1.40$) and low nationalism ($b = -.51, p < .001, Exp(B) = .60$).

1 *AfD profile.* Seven out of 506 participants identified with the right-wing populist party
2 *Alternative for Germany* (AfD). Identification with this relatively new populist party could be
3 described through a function ($\chi^2(1) = 36.23, p < .001, \text{Nagelkerke } R^2 = .51$) of low human
4 dignity ($b = -1.94, p < .001, \text{Exp}(B) = .14$). Of course, this particular result should be treated with
5 caution, due to the low number of sympathizers.

6 Furthermore, 10 participants identified with the Pirate Party. However, Pirate Party
7 identification could not be described through any function.

8 **Discussion**

9 First investigations of the loyalty scale produced very encouraging results. Not only did
10 we obtain the expected factor structure (EMA and INDEV and their three sub-dimensions) of the
11 concept and provided evidence for the reliability of the scales, we also obtained new insights into
12 how the factors relate to each other. As expected, we found meaningful relation between trust
13 and constitutional patriotisms, but also obtained evidence for the special role of nationalisms.
14 Unlike trust and constitutional patriotism, nationalism is negatively linked with the three
15 dimensions of INDEV. However, this is in line with previous research (e.g., Adorno et al., 1950;
16 Schatz et al., 1999), defining nationalism as *pseudo* or *blind* patriotism, thus an unreflected form
17 of attachment towards a system that does not take democratic values into account.

18 Validating the concept, we found different patterns of political loyalty across political
19 orientation and party identification. Not surprisingly, political loyalty was the strongest among
20 individuals moderate in political orientation. The climax of the subscales of constitutional
21 patriotism and trust, for example, lies in the middle of the left-right political orientation.
22 Accordingly, individuals identifying with parties of the political center (Christian Democrats,
23 Social Democrats, or the Greens) report high levels of trust into the state, while individuals

1 identifying with more left-wing parties (Socialists) are generally low in trust. However,
2 nationalism as well as INDEV dimensions show a more complex relationship: INDEV decreases,
3 while nationalistic feelings increases from left- to right-wing orientation. This is consistent with
4 studies showing that left-wing party supporters cherish certain norms like equality to a greater
5 extent, whereas right-wing party supporters generally show higher degrees of nationalism (e.g.,
6 Barnea & Schwartz, 1998; Cochrane, Billig, & Hogg, 1979; Schatz et al., 1999; Sidanius, 1990).

7 In sum, this study provided first evidence for the reliability, the validity and the usability
8 of the loyalty scale. In the next study, we aimed at further strengthening the construct validity of
9 the political loyalty concept by relating it to constructs often applied in the area of political
10 attitudes.

11 **Study 2**

12 As we define political loyalty as an attitude, a somewhat related approach can be found in
13 the sociological concept of legitimacy (e.g., Dogan, 1988; Lipset, 1959; Weatherford, 1992).
14 Legitimacy most often is defined as “the belief that existing political institutions are the most
15 appropriate or proper ones for the society“ (Lipset, 1959, p. 86). However, the concept has often
16 been criticized as ill-defined, “often invoked instead of described and described instead of
17 defined” (Suchman, 1995, p .295). Based on Solinger et al.’s (2008) finding that an affective,
18 cognitive, and behavior approach (see also Eagly & Chaiken, 1993) shows the best construct
19 validity regarding a person’s attachment towards abstract groups, we introduced the loyalty
20 concept consisting of a cognitive part and an emotional attachment part. To stress the validity of
21 the loyalty concept, we took two Altemeyer’s (1981, 1996) right-wing authoritarianism into
22 account, which consists of the subconcepts: submissiveness to authorities, aggressiveness against
23 deviants and outgroups, as well as adherence to traditions and social norms.

1 Based on this theorizing and our findings in Study 1, we predict that political loyalty
2 should be positively correlated (convergent validity) but not identical to political legitimacy.
3 Furthermore, we also expect only nationalism, but no other subscale of political loyalty
4 (discriminant validity), should be positively associated with right-wing authoritarianism.

5 **Method**

6 **Participants and procedure.** Data were collected via Questback EFS Survey through the
7 e-mail distribution list of the University and social networks (e.g., Facebook). From original 383
8 participants 64 were excluded because they participated in previous studies or were not German
9 citizens. Hence, the following analysis were based on the remaining 319 participants (229
10 females, 87 males, three unknown gender; M age = 28.41 years, SD = 11.30; 297 German
11 citizenship only, 22 dual citizenship; 240 students, 52 employed, 11 unemployed, three
12 apprenticeships, 13 unknown profession or education).

13 **Materials.**

14 **Political loyalty.** The same political loyalty questionnaire as in Study 1 was used. The
15 questionnaire showed again good reliability (Cronbach's α = .85) as well as the subscales (trust =
16 .93, constitutional patriotism = .85, nationalism = .90, human dignity = .81, freedom of speech =
17 .74, fair trial = .84).

18 **Right-wing-authoritarianism.** We used the German version of the right-wing
19 authoritarianism three-dimensional scale by Funke (2003, 2005). The scale consists of 12 items
20 rated on seven-point Likert scales. They can be divided into three subscales: Authoritarian
21 submission (four items, e.g., "Obedience and respect for authority are the most important values
22 children should learn."), authoritarian aggression (four items, e.g., "What our country really
23 needs instead of more 'civil rights' is a good stiff dose of law and order."), and conventionalism

1 (four items, e.g., “The withdrawal from tradition will turn out to be a fatal fault one day.”). The
2 overall questionnaire (.82) but not the subscales (authoritarian submission = .67, authoritarian
3 aggression = .63, conventionalism = .57) show good reliability (Cronbach’s α s). Hence, we
4 refrained from analyzing the subscales separately.

5 ***Political legitimacy.*** We used 27 items (originally derived from the American National
6 Election Study, 1976) from Weatherford’s (1992) revised model of political legitimacy
7 orientation, which can be divided into eight subscales: Political interest (four items, e.g.,
8 “Sometimes politics and government seem so complicated that a person like me can’t really
9 understand what’s going on.”), citizen duty (three items, e.g., “It isn’t so important to vote when
10 you know your party doesn’t have any chance to win.”), civic pride (two items, e.g., “It isn’t so
11 important to vote when you know your party doesn’t have any chance to win.”), subjective
12 political competence (two items, e.g., “People like me don’t have any say about what the
13 government does.”), accountability mechanisms/parties and elections (three items, e.g., “How
14 much do you feel that political parties help to make the government pay attention to what the
15 people think?”), official’s attentiveness to constituents (four items, e.g., “I don’t think public
16 officials care much what people like me think.”), competence/efficiency of officials (three items,
17 e.g., “Do you think that people in government waste a lot of the money we pay in taxes, waste
18 some of it, or don’t waste very much of it?”), and fairness of the political process (six items, e.g.,
19 “How much of the time do you think that the courts guarantee everyone a fair trial?”). After
20 excluding two items, the overall questionnaire (.90) show very good reliability (Cronbach’s α).
21 Only three of the eight subscales (political interest = .71, citizen duty = .02, accountability
22 mechanisms/parties and elections = .92, official’s attentiveness to constituents = .93,
23 competence/efficiency of officials = .47, fairness of the political process = .50) consist of more

1 than two items and showed good reliability (Cronbach's α s). Hence, we refrained from analyzing
2 the subscales separately. There were nominal as well as interval (ranging from three- to seven-
3 point Likert scales) items. Hence, we calculated the scale mean by dummy coding nominal items
4 and giving interval scales a range from 0 to 1.

5 ***Political orientation.*** The same items as in Study 1 were used.

6 **Results**

7 **Convergent and divergent validity.** As predicted, political loyalty was positively
8 correlated (Pearson) with political legitimacy ($r = .59, p < .001$) indicating that both concepts
9 share variance but are by no means identical. Not surprisingly, we found negative correlations
10 with the concept of right-wing authoritarianism ($r = -.26, p < .001$). Accordingly, political
11 legitimacy and right-wing authoritarianism were also negatively correlated ($r = -.23, p < .001$).
12 Analyzing the subscales of the political loyalty questionnaire separately, political legitimacy was
13 positively correlated with trust ($r = .63, p < .001$), constitutional patriotism ($r = .49, p < .001$),
14 human dignity ($r = .20, p < .001$), freedom of speech ($r = .16, p = .005$), and fair trial ($r = .26, p$
15 $< .001$), but not correlated with nationalism ($r = .07, p = .204$). Interestingly, right-wing
16 authoritarianism was not correlated with trust ($r = .04, p = .506$) nor constitutional patriotism ($r =$
17 $-.01, p = .801$), but positively correlated with nationalism ($r = .54, p < .001$), and negatively
18 correlated with all internalization subscales (human dignity: $r = -.61, p < .001$; freedom of
19 speech: $r = -.46, p < .001$; fair trial: $r = -.46, p < .001$). For a better understanding of the
20 correlations see also Table 5.

21

22

23

1 Table 5

2 *Pearson's Correlation Coefficients Between Scale Means of Political Loyalty, Political*

3 *Legitimacy, and Right-Wing-Authoritarianism (N = 319)*

Scales	Political Legitimacy	Right-Wing-Authoritarianism
Political Loyalty	.59**	-.26**
Trust	.63**	.04
Const. Patriotism	.49**	-.01
Nationalism	.07	.54**
Human Dignity	.20**	-.61**
Freedom of Speech	.16*	-.46**
Fair Trial	.26**	-.46**

4 *Note.* $N = 319$; * $p < .05$, ** $p \leq .001$.

5 **Predicting political orientation.** In order to demonstrate the usability of the loyalty scale
6 it is important to show that the measurements succeed competing scales. Predicting the left-right
7 political orientation through subscales of political loyalty, a significant linear regression equation
8 was found ($F(3, 315) = 38.97, p < .001, R^2 = .27$) that reveals significant effects of nationalism
9 ($b = .32; p < .001$), human dignity ($b = -.33; p < .001$), and fair trial ($b = .17; p = .002$). Also the
10 right-wing authoritarianism ($F(1, 317) = 75.23, b = .51, p < .001, R^2 = .19$) but not political
11 legitimacy ($F(1, 317) = 1.77, b = .44, p = .185, R^2 < .01$) did predict left-right political
12 orientation. Predicting the liberal-conservative orientation scale through subscales of political
13 loyalty, a linear regression equation ($F(3, 315) = 52.10, p < .001, R^2 = .25$) revealed significant
14 effects of nationalism ($b = .31; p < .001$) and human dignity ($b = -.26; p < .001$). Again, right-
15 wing authoritarianism ($F(1, 317) = 116.56, b = .74, p < .001, R^2 = .27$) but not political
16 legitimacy ($F(1, 317) = 0.94, b = -.39, p = .333, R^2 < .01$) predicted liberal-conservative political
17 orientation.

1 **Discussion**

2 The goal of the present study was to substantiate the convergent as well as divergent
3 validity of the loyalty construct by relating it to political legitimacy and right-wing
4 authoritarianism. In accordance with our hypotheses, we found that political loyalty was
5 positively correlated with political legitimacy, except for the nationalism subscale, which was –
6 not surprisingly, positively associated with right-wing authoritarianism. In addition to that,
7 INDEV subscales were negatively correlated with right-wing authoritarianism, further
8 confirming the negative relationship between nationalistic feelings and INDEV already shown in
9 Study 1. In order to expand our knowledge and to provide further evidence for the usefulness of
10 the loyalty scale, in the next study, we tested groups across the left and right political spectrum.

11 **Study 3**

12 In Study 3, we further advanced our understanding of the scale's validity by replicating
13 the previous findings concerning political orientation in politically distinct groups. Specifically,
14 we compared left-wing protesters with right-wing fraternity members (*Burschenschaften*,
15 German student corps, Catholic student associations). Based on our findings of Studies 1 to 2, we
16 hypothesized that left-wing protesters should score higher on INDEV, while fraternity members
17 should score higher on nationalism.

18 **Method**

19 **Participants and procedure.** In order to compare political groups differing in their
20 political orientation, we collected data ($N = 120$; 23 females, 97 males; M age = 37.47 years,
21 range 17-77 years) from rather right-wing fraternity members (*Burschenschaften*, German
22 student corps, Catholic student associations) as well as from left-wing protesters. Data of the
23 fraternity members ($N = 73$; four females, 69 males; M age = 40.12 years, range 19-77 years)

1 were collected online via Questback EFS Survey. Data of the left-wing protesters ($N = 47$; 19
2 females, 28 males; M age = 33.36 years, range 17-69 years) were collected during a rally and a
3 climate march.

4 **Materials.**

5 **Political loyalty.** We used the political loyalty questionnaire as presented in Study 1. The
6 overall questionnaire (.87) as well as the subscales (trust = .97, constitutional patriotism = .92,
7 nationalism = .95, human dignity = .85, freedom of speech = .74, fair trial = .78) show very good
8 reliability (Cronbach's α s).

9 **Political orientation.** We used the same items as in Study 1.

10 **Results**

11 **Political orientation.** First, we compared the political orientation of the two groups. The
12 fraternity members can be described as slightly right-wing (M left-right = 4.55, $SD = 1.04$; 1 =
13 strongly left, 7 = strongly right) and moderate on the liberal-conservative orientation scale (M
14 liberal-conservative = 3.90, $SD = 1.66$; 1 = very liberal, 7 = very conservative). The protesters
15 can be described as left-wing (M left-right = 1.72, $SD = 0.95$; 1 = strongly left, 7 = strongly right)
16 and liberal to very liberal (M liberal-conservative = 2.04, $SD = 1.18$; 1 = very liberal, 7 = very
17 conservative). Hence, Mann-Whitney U tests confirmed that the two groups significantly differ
18 in both constructs, the left-right ($U = 156.00$, $p < .001$) as well as the liberal-conservative ($U =$
19 156.00 , $p < .001$) political orientation scale.

20 **Political loyalty differences.** A Mann-Whitney U test confirmed that the fraternity
21 members (M Loyalty = 4.69, $SD = 0.49$) showed higher overall political loyalty ($U = 485.50$, $p <$
22 $.001$) than the left-wing protesters (M loyalty = 3.92, $SD = 0.51$). Concerning EMA, fraternity
23 members (M trust = 4.16, $SD = 1.16$; M constitutional patriotism = 5.35, $SD = 0.76$; M

1 nationalism = 4.26, $SD = 1.27$) scored higher in trust ($U = 668.00, p < .001$), constitutional
 2 patriotism ($U = 401.00, p < .001$), and nationalism ($U = 198.50, p < .001$) than the left-wing
 3 protesters (M trust = 2.81, $SD = 1.10$; M constitutional patriotism = 3.70, $SD = 1.13$; M
 4 nationalism = 1.55, $SD = 0.95$). Concerning INDEV, left-wing protesters (M Dignity = 5.42, SD
 5 = 0.60) showed a higher score in human dignity ($U = 601.00, p < .001$) than fraternity members
 6 (M Dignity = 4.22, $SD = 1.10$). The groups did not significantly differ in terms of freedom of
 7 speech ($p < .661$) or fair trial ($p = .066$; for more details see Table 6).

8 Table 6

9 *Scale Means Between Fraternity Members and Left-Wing Protesters (N = 120)*

Scales	Fraternity Members (N = 73)		Left-Wing Protesters (N = 47)		U
	M	SD	M	SD	
Political loyalty	4.69	0.49	3.92	0.51	485.50**
Trust	4.16	1.16	2.81	1.10	668.00**
Const. Patriotism	5.35	0.76	3.70	1.13	401.00**
Nationalism	4.26	1.27	1.55	0.95	198.50**
Human Dignity	4.22	1.10	5.42	0.60	601.00**
Freedom of Speech	4.57	1.14	4.74	0.87	1634.00
Fair Trial	5.56	0.49	5.44	0.51	1379.50

10 *Note.* N = 120; * $p < .05$, ** $p \leq .001$.

11 **Further differences.** Most of the fraternity members were male – because most
 12 fraternities are all-male organizations – and of older age – members have a lifelong commitment
 13 to their fraternity than protesters. Hence, the two groups differed in terms of sex ($\chi^2(1) = 22.54, p$
 14 $< .001$) and age ($U = 1244.00, p = .011$).

15

1 **Discussion**

2 In this study, we aimed at validating the loyalty scale in politically distinct groups. As
3 hypothesized, fraternity members, being more right-wing and at the same time more moderate in
4 terms of their political orientation, showed higher EMA, especially nationalism scores. Left-wing
5 protesters, however, exhibited significantly higher scores of internalization of human dignity.
6 Somewhat surprisingly, we did not find any differences regarding the internalization of freedom
7 of speech and fair trial. This might be due to the fact that many German fraternities, especially
8 Burschenschaften, originated from student protest movements against aristocracy in the 19th
9 century (Jaraus, 2012). German fraternity members therefore highlight values like equality and
10 freedom as essential parts of an anti-particularist German nation. This pattern notwithstanding,
11 our findings underline the external validity of the loyalty as a useful construct in the political
12 context.

13 Based on these encouraging findings regarding the reliability, validity and usefulness of
14 the loyalty scale, we were in the next step interested in the relation between loyalty and political
15 engagement taking other well-known factors, such as injustice and social identity, into account.
16 As delineated above, many studies show that individuals who are attached to their political
17 system act on its behalf, while individuals who are alienated from their system tend to adopt
18 more radical forms of political engagement (e.g., Cichocka et al., 2018; Fennema & Tillie, 2001;
19 Tausch et al., 2011). In Study 4, we wanted to test this theoretical assumption in a controlled
20 laboratory setting. Hence, we experimentally induced relative deprivation and tested, whether
21 EMA and INDEV, in concert with other well-known factors predict different forms (peaceful vs.
22 violent) of protest intentions.

23

1 **Study 4**

2 Political engagement is often understood as a response to subjective injustice (van
3 Zomeren et al., 2008), most often derived from social comparison process as highlighted by
4 relative deprivation theory (e.g., Gurr, 1970; Merton, 1957; Runciman, 1966). To test our main
5 hypothesis, that people's way of political engagement depends on political loyalty, we
6 experimentally manipulated subjects' experience of relative deprivation. This manipulation was
7 based on Runciman's (1966) definition that relative deprivation mainly derives from
8 discrepancies between expectations (feelings of entitlement) and social reality (social
9 comparison processes). In the present study, we reminded psychology students on their efforts in
10 order to become a psychologist (entitlement phase) and then confronted them with relatively low
11 (relative deprivation) or high (relative gratification) income predictions in comparison to other
12 professions. These expected feelings of injustice were then related to political loyalty and other
13 meaningful concepts as group identification (see van Zomeren et al., 2008) and we assessed
14 students intention to rebel peacefully vs. violently.

15 **Method**

16 **Participants and procedure.** Sixty-three psychology students (51 females, 12 males; *M*
17 age = 21.46 years, *SD* = 4.19, range 18-46 years) were recruited from a German university. Data
18 were collected via E-Prime 2.0 (SP2), which randomly assigned the participants to the
19 experimental (*N*=31) or control (*N*=32) group. First, political loyalty and group identification
20 were measured, followed by a relative deprivation paradigm. Finally, participant's protest
21 intention was collected.

22

23

1 **Materials.**

2 **Relative deprivation paradigm.** The relative deprivation paradigm consisted of two
3 distinct phases in order to induce feelings of relative deprivation: an entitlement phase and a
4 relative deprivation/gratification phase. All participants (control and experimental group) first
5 conducted the entitlement phase. The phase consists of five questions about past personal
6 achievements (e.g., Abitur grade) and efforts (e.g., “How hard, in your opinion, is it to get an
7 admission in psychology?”) as well as two questions of current group efforts (e.g., “Compared to
8 other studies, how high do you estimate the average learning curve studying psychology?”).
9 Based on psychology student’s strict admission restriction in Germany, this manipulation was
10 intended to foster students’ entitlement. In a second phase, the experimental group was
11 confronted with relative deprivation and the control group with relative gratification. Participants
12 first were informed about the average monthly salary in Germany (experimental group: 3910
13 Euro vs. control group: 3161 Euro) and were asked to give a salary estimation for psychologists.
14 Second, participants received feedback on the average salary of psychologists (experimental
15 group: 3407 Euro vs. control group: 4343 Euro) and were provided with a ranking table showing
16 the average salary of psychologists together with seven other professions (experimental group:
17 psychologists on sixth position vs. control group: psychologists on third position). Finally,
18 relative deprivation was measured (rated on five-point Likert scale) with five affective (e.g.,
19 “When I think about my future salary, I feel angry”) and five cognitive items (e.g., inverted:
20 “Compared to other professions: How good is the average salary of psychologists?”). The scale
21 shows very good reliability with Cronbach’s $\alpha = .93$.

22 **Group identification.** Group identification was measured with the item “I feel connected
23 to psychologists” (rated on six-point Likert Scale; 1 = not at all, 6 = absolute).

1 **Political loyalty.** We used the political loyalty questionnaire as presented in Study 1. In
2 order to enhance predictability, we used the main scales for analyses. The EMA (20 items,
3 Cronbach's $\alpha = .90$) and INDEV scale (17 items, Cronbach's $\alpha = .89$) show very good reliability.

4 **Protest intentions.** In order to measure the participant's legal/non-violent as well as
5 illegal/violent protest intentions, we used the political mobilization scale introduced by
6 Moskalkenko and McCauley (2009). The scale consists of eight items, which can be divided into
7 two scales: Activism intention (legal/non-violent protest intentions) and radicalism intention
8 (illegal/violent protest intentions).

9 **Activism intention.** The activism scale consists of four items (rated on seven-point Likert
10 scales; e.g., "I would join/belong to an organization that fight for psychologist's political and
11 legal rights"). After eliminating one item, the scale shows good reliability with Cronbach's $\alpha =$
12 .81.

13 **Radicalism intention.** The radicalism scale consists of four items (rated on seven-point
14 Likert scales; e.g., "I would continue to support an organization that fights for psychologist's
15 political and legal rights even if the organization sometimes breaks the law"). After eliminating
16 one item, the scale shows sufficient reliability with Cronbach's $\alpha = .77$.

17 **Results**

18 **Relative deprivation manipulation check.** We checked whether the manipulation was
19 successful by analyzing the relative deprivation scores (10 items). A *t*-test showed a significant
20 difference between experimental ($M = 3.5$, $SD = 0.53$) and control ($M = 2.4$, $SD = 0.49$) group;
21 $t(61) = -8.44$, $p < .001$.

22 **Relations between the constructs.** We found positive correlations (Person's
23 correlations; see also Table 7) between relative deprivation and radicalism intention ($r = .25$; $p =$

1 .047) as well as between group identification and activism intention ($r = -.29; p = .023$).
 2 Furthermore, there was a negative correlation between EMA and radicalism intention ($r = -.27; p$
 3 $= .034$). Activism and radicalism intention were also positively correlated ($r = .35; p = .005$);
 4 EMA and INDEV were negatively correlated ($r = -.27; p = .034$).

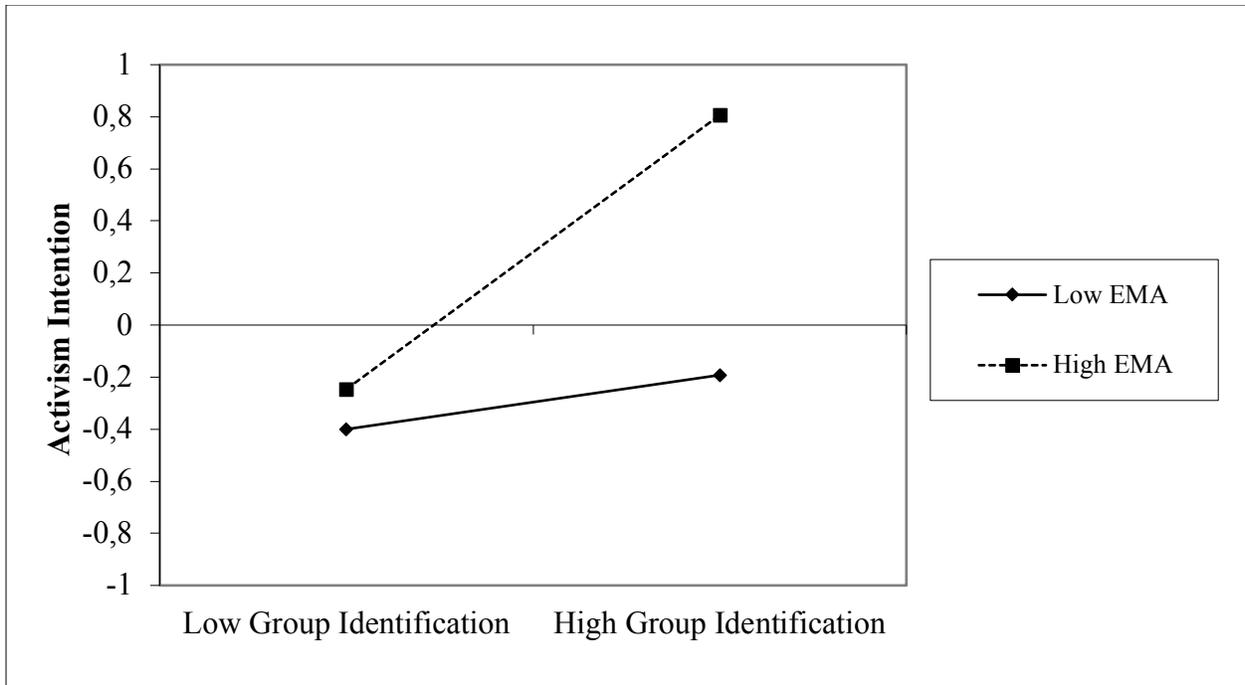
5 Table 7

6 *Pearson's Correlation Coefficients Between the Constructs (N = 63)*

Scales	1	2	3	4	5	6
1. Relative Deprivation	–					
2. Group Identification	< -.01	–				
3. EMA	.07	.04	–			
4. INDEV	-.08	-.07	-.27*	–		
5. Activism Intention	.14	.29*	.22	-.22	–	
6. Radicalism Intention	.25*	.09	-.27**	-.13	.35**	–

7 *Note.* $N = 63$; * $p < .05$, ** $p \leq .001$.

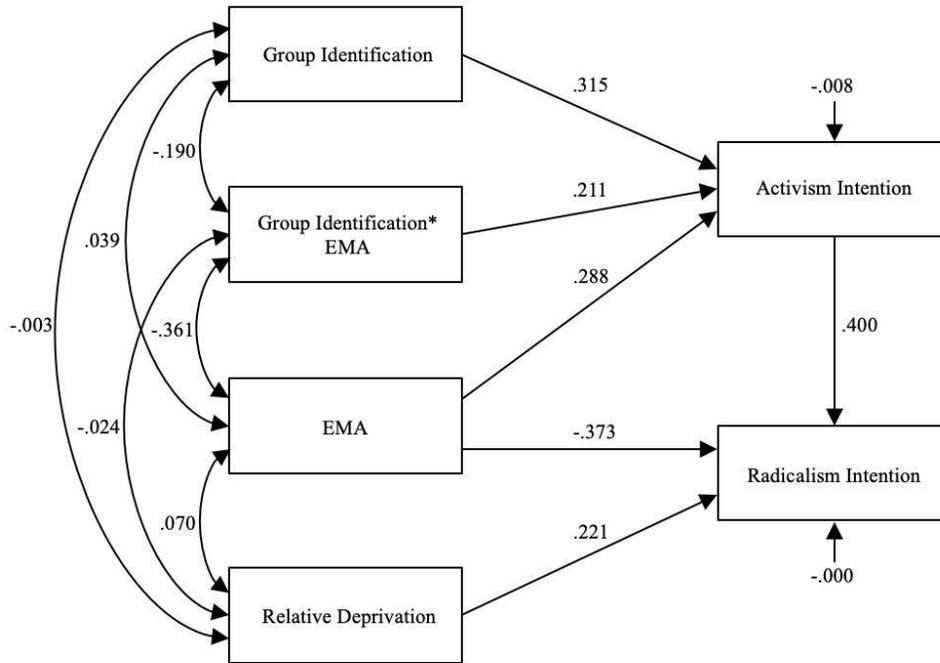
8 **Predicting activism intention.** A linear regression was calculated to predict z-
 9 standardized activism intention. In this respect, relative deprivation, INDEV, sex, and age were
 10 not significant predictors of activism and therefore excluded from further analysis; remaining
 11 predictors were z-standardized. The regression equation ($F(3, 59) = 4.25, p = .009, R^2 = .18$)
 12 reveals a significant main effect for group identification ($b = .32; p = .011$) and EMA ($b = .29; p$
 13 $= .024$), as well as a marginally significant interaction effect between group identification and
 14 EMA ($b = .21; p = .061$). We conducted a simple slopes analysis (group identification as
 15 independent variable, EMA as moderator; + 1 *SD*, simple slope = .53, $p = .005$) revealing high
 16 activism intention only when group identification and EMA are high (see Figure 4).



1
2 *Figure 4.* Emotional attachment (EMA) as moderator between group identification and activism
3 intention.

4 **Predicting radicalism intention.** A linear regression was calculated to predict z-
5 standardized radicalism intention. Group identification, INDEV, sex, and age were not
6 significant predictors of radicalism intention and therefore excluded from further analysis;
7 remaining predictors were z-standardized. The regression equation ($F(2, 60) = 5.11, p = .009, R^2$
8 $= .15$) reveals a significant positive main effect for relative deprivation ($b = .27; p = .027$) and a
9 negative main effect for EMA ($b = -.29; p = .019$).

10 **Path analysis.** To validate our findings, a path analyses based on the maximum
11 likelihood method was conducted with the help of *R* (version 3.5.1) package *Lavaan* (version
12 0.6.3). As expected the path model showed a good model fit ($CFI = 1.00; RMSEA < .01; SRMR$
13 $= .03$). The graphical structure is given in Figure 5 and the coefficient estimates in Table 8.



1
 2 *Figure 5.* Predicting activism and radicalism intention. All coefficient estimates: $p < .050$;
 3 number of observations = 63; degrees of freedom = 24.
 4 Table 8
 5 *Coefficient Estimates of the Path Analysis Predicting Activism and Radicalism Intention (N =*
 6 *63)*

Scales	Estimate	SE	<i>p</i>
Activism Intention			
on Group Identification	.32	.12	.007
on EMA	.29	.12	.017
on Group Identification*EMA	.21	.11	.048
Radicalism Intention			
on Relative Deprivation	.22	.11	.037
on EMA	-.37	.11	.001
on Activism Intention	.40	.11	< .001

1 **Discussion**

2 In the present study we examined whether loyalty is related to people's protest intention
3 in the context of perceived injustice. For this purpose we invented an experimental relative
4 deprivation paradigm in which feelings of injustice could be experimentally manipulated and
5 linked to loyalty. We found that found that EMA worked as a positive predictor for peaceful and
6 a negative predictor for radical protest intentions. Group identification was predictive for
7 peaceful – especially when EMA was high (see interaction effect in Figure 3) – and relative
8 deprivation for radical protest intentions. This is in line with van Zomeren et al. (2008),
9 postulating that especially affective injustice and politicized identity are strong predictors for
10 collective action. However, consistent with previous findings, (e.g., Moskaleiko & McCauley,
11 2009) our findings indicate that peaceful and radical protest intentions are by no means exclusive
12 but are related, presumably to different stages in a political socialization process (see Sprinzak,
13 1991).

14 In sum, going beyond validation Studies 1 to 3, in Study 4, we experimentally tested
15 whether EMA and INDEV, in the context of relative deprivation and group identification, are
16 predictors of different (peaceful vs. violent) forms of protest intentions. The results strongly
17 support our hypothesis regarding EMA by indicating that EMA determines whether people's
18 behavioral intentions are peacefully or violently in nature. Neither the factor group identification
19 nor relative deprivation was predictive in this respect. Interestingly, we found that only the
20 emotional factor EMA, but not the cognitive factor of political loyalty, INDEV, was related with
21 protest intentions. However, this is consistent with other research lines (e.g., Smith & Ortiz,
22 2002; van Zomeren et al., 2008) showing that affective forms of relative deprivation produce

1 stronger effects on political behavior than cognitive aspects. In this respect, our results underline
2 the importance of emotions and feelings in the political context.

3 Despite these encouraging findings, there were limitations that were addressed in the
4 final study. First, to further stress the usability of the loyalty scale in predicting political action,
5 we measured behavior rather than mere intentions. Moreover, we assessed the political
6 background of the participants to investigate whether participants' overall political orientation or
7 current political involvement affected or interacted with those findings.

8 **Study 5**

9 The aim of Study 5 was first of all to replicate findings of Study 4, that is, EMA (and not
10 INDEV) predicts the way people engage politically (peacefully or violently). To expand our
11 knowledge on the role of loyalty in the political context, we also assessed the political
12 background of the participants. Furthermore, we examined the relation between protest
13 intentions and actual political behavior. For this purpose, we used the opportunity that the
14 psychology student council of the University organized a protest day and rally, raising awareness
15 of unjustly low salaries among psychologists. Hence, we teamed up with the psychology student
16 council in running the next study. After students finished the relative deprivation paradigm and
17 questionnaires, and the alleged end of the experiment, participants were asked whether they were
18 willing to help the student council with their preparations for the information day. We
19 hypothesized that students with high protest intentions would be more likely to help with the
20 upcoming political action day and rally, hence, show peaceful protest behavior. In other words,
21 based on our previous findings and theoretical framework, we expected that EMA would
22 indirectly foster peaceful protest behavior but should be negatively associated with radical
23 protest intentions.

1 **Method**

2 **Participants and procedure.** Ninety-eight participants (81 females, 17 males; M age =
3 21.56 years, $SD = 2.88$, range 18-31 years) were psychology students from a German university.
4 After assessing political loyalty using E-Prime 2.0 (SP2), relative deprivation was manipulated
5 by randomly assigning the participants to experimental ($N=49$) or control ($N=49$) group before
6 group identification and protest intention was assessed. As a political behavior measurement,
7 participants were asked whether they are willing to join a protest campaign organized by the
8 psychology student council.

9 **Materials.**

10 *Relative deprivation.* We used the same relative deprivation manipulation as in Study 4.
11 The relative deprivation scale (ten items) shows very good reliability with Cronbach's $\alpha = .90$.

12 *Group identification.* Group identification was measured with the item "I identify myself
13 as a psychologist" (rated on six-point Likert scale; 1 = not at all, 6 = absolute).

14 *Political loyalty.* We used the same political loyalty scale as in in Study 1. EMA (20
15 items, Cronbach's $\alpha = .91$) as well as INDEV (17, Cronbach's $\alpha = .83$) show good reliability.

16 *Political orientation.* The same items as in Study 1 were used.

17 *Political involvement.* Whether a person was politically involved was measured with the
18 item "I am highly politically active" (rated on seven-point Likert scales).

19 *Protest intentions.* We used the political mobilization scale by Moskaleiko and
20 McCauley (2009) as presented in Study 4. Activism intention (four items, Cronbach's $\alpha = .81$)
21 shows good reliability, unlike radicalism intention (four items, Cronbach's $\alpha = .67$).

22 *Protest behavior.* In collaboration with the psychology student council, who were
23 organizing an information day and rally concerning unjustly low salaries among psychologists,

1 we examined participant's protest behavior for better salaries. Based on a pre-test ($N = 30$,
2 "Please sort the following protest actions from least to most personal effort"), there were five
3 protest steps (Guttman scale): 1. not willing to follow the confederate to the office, 2. willing to
4 follow the confederate to the office, 3. willing to follow the confederate to the office and sign a
5 petition, 4. willing to follow the confederate to the office, sign a petition, and take some flyers
6 for distribution, 5. willing to follow the confederate to the office, sign a petition, take some flyers
7 for distribution, and help creating a protest poster.

8 **Results**

9 **Manipulation check.** We checked whether the relative deprivation manipulation was
10 successful. An independent-samples t -test revealed a significant difference ($t(96) = -6.81, p$
11 $< .001$) in relative deprivation scores for experimental ($M = 3.25, SD = 0.59$) and control ($M =$
12 $2.5, SD = 0.48$) group. However, group identification did not differ significantly ($t(95) = 0.85, p$
13 $= .397$) between experimental ($M = 4.31, SD = 1.40$) and control group ($M = 4.54, SD = 1.32$).

14 **Relations between the constructs.** Relative deprivation correlated (Person's
15 correlations) positively with activism ($r = .25; p = .015$) and radicalism intention ($r = .22; p =$
16 $.033$), and negatively with EMA ($r = -.31; p = .002$). Furthermore, group identification correlated
17 positively with activism intention ($r = .51; p < .001$) and EMA negatively with radicalism
18 intention ($r = -.33; p = .001$). Again, activism and radicalism intention were positively correlated
19 ($r = .42; p < .001$). Protest behavior (ordinally scaled) was positively correlated (Spearman's
20 correlations) with group identification ($r = .21; p = .043$), activism intention ($r = .32; p = .002$),
21 and radicalism intention ($r = .21; p = .036$). For a complete overview see Table 9.

22

23

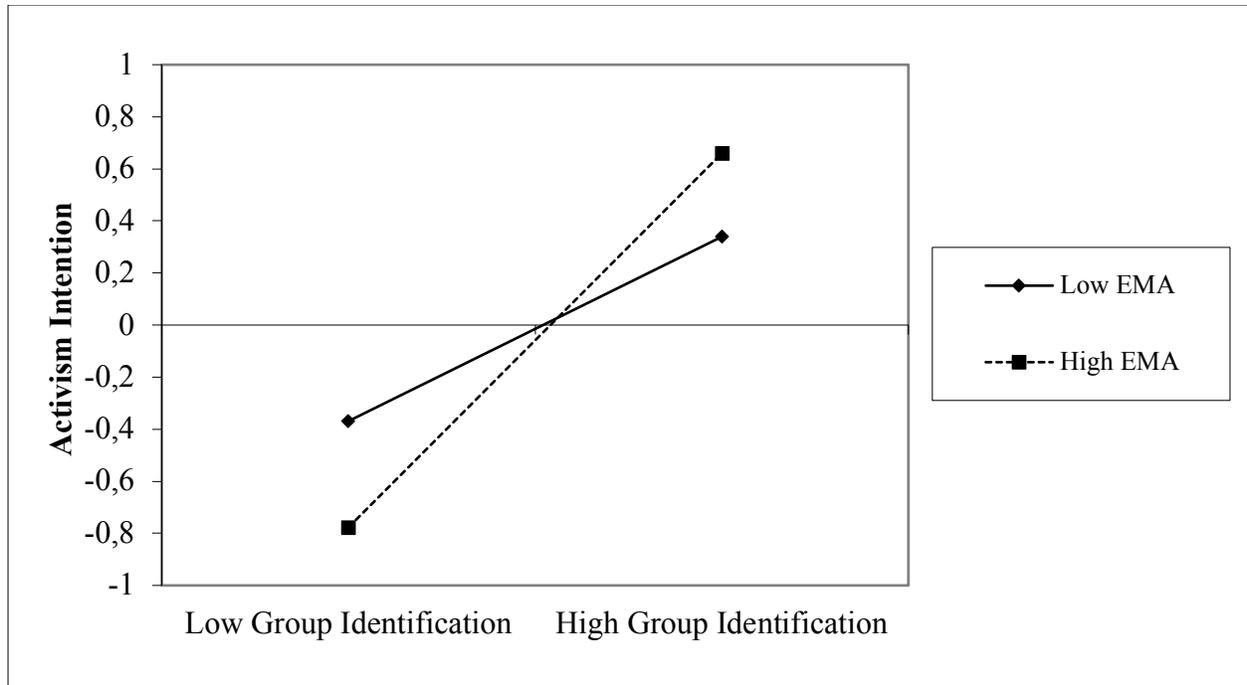
1 Table 9

2 *Correlation Coefficients Between the Constructs (N = 98)*

Scales	1	2	3	4	5	6	7
1. Relative Deprivation	–						
2. Group Identification	< .01	–					
3. EMA	-.31*	.14	–				
4. INDEV	-.19	-.08	.02	–			
5. Activism Intention	.25*	.51**	-.05	-.11	–		
6. Radicalism Intention	.22*	.09	-.33**	-.17	.42**	–	
7. Protest Behavior	.05	.21*	-.07	-.07	.32*	.21*	–

3 *Note.* $N = 98$; * $p < .05$, ** $p \leq .001$; correlations between the concepts = Pearson's r , except for
4 protest behavior (due to ordinal scale) = Spearman's r .

5 **Predicting activism intention.** A linear regression was calculated to predict z-
6 standardized activism intention. INDEV, sex, age, right-wing as well as liberal-conservative
7 political orientation, and political involvement were not significant predictors of activism and
8 therefore excluded from further analysis; remaining predictors were z-standardized. The
9 regression equation ($F(4, 92) = 12.54, p < .001, R^2 = .35$) reveals a significant main effect for
10 relative deprivation ($b = .28; p = .004$) and group identification ($b = .54; p < .001$) as well as a
11 significant interaction effect between group identification and EMA ($b = .18; p = .029$). The
12 main effect for EMA was not significant ($b = -.02; p = .818$). We conducted a simple slopes
13 analysis (group identification as independent variable, EMA as moderator; + 1 SD , simple slope
14 = .54, $p = .002$) revealing again high activism intention when group identification and EMA are
15 both high. For a graphical depiction of the interaction see Figure 6.



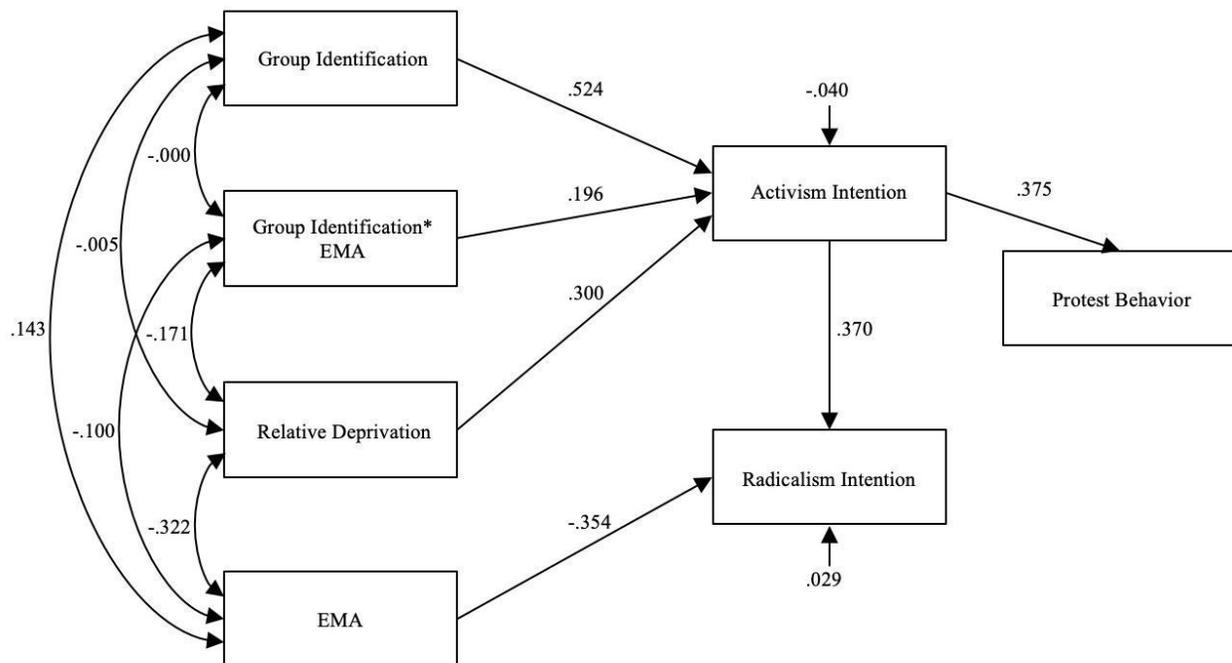
1
2 *Figure 6.* Emotional attachment (EMA) as moderator between group identification and activism
3 intention.

4 **Predicting radicalism intention.** A linear regression was calculated to predict z-
5 standardized radicalism intention. Relative deprivation, group identification, INDEV, sex, age,
6 right-wing as well as liberal-conservative political orientation, and political involvement were
7 not significant predictors of radicalism intention and therefore excluded from further analysis;
8 the remaining predictor was z-standardized. The regression equation ($F(1, 96) = 12.04, p = .001,$
9 $R^2 = .11$) reveals a significant main effect for EMA ($b = -.34; p = .001$).

10 **Predicting protest behavior.** An ordinal logistic regression was calculated to predict
11 protest behavior. Relative deprivation, group identification, EMA, INDEV, radicalism intention,
12 sex, and age were not significant predictors of protest behavior and therefore excluded from
13 further analysis; the remaining predictor was z-standardized. The regression equation ($\chi^2(1) =$
14 $11.80, p = .001,$ Nagelkerke's pseudo $R^2 = .13$) reveals a significant main effect for activism
15 intention ($p = .001$). However, the test of parallel lines was significant ($\chi^2(3) = 18.39, p < .001$),

1 indicating that the effects of activism intention are not consistent across all protest behavior
 2 categories. Hence, an additional multinomial logistic regression ($\chi^2(4) = 14.06, p = .007$) analysis
 3 was conducted, in order to predict the different categories of Guttman scaled protest behavior
 4 through activism intention. Interestingly, – step 1 as reference category – activism intention does
 5 not predict steps 2 ($p = .551$) and 3 ($p = .449$), but steps 4 ($b = .67; p = .010$) and 5 ($b = .91; p =$
 6 $.005$), showing that activism intention becomes predictive when political behavior is personal
 7 effortful.

8 **Path analysis.** Like in Study 4, a path analyses based on the diagonally weighted least
 9 squares method (due to the ordinal variable protest behavior) was conducted with the help of *R*
 10 (version 3.5.1) package *Lavaan* (version 0.6.3). Again, the path model showed a good model fit
 11 (CFI = 1.00; RMSEA < .01; SRMR = .02). The graphical structure can be found in Figure 7 and
 12 the coefficient estimates in Table 10.



13
 14 *Figure 7.* Predicting activism and radicalism intention as well as protest behavior. All coefficient
 15 estimates: $p < .050$; number of observations = 98; degrees of freedom = 29.

1 Table 10
 2 *Coefficient Estimates of the Path Analysis Predicting Activism Intention, Radicalism Intention*
 3 *and Protest Behavior (N = 98)*

Scales	<i>Estimate</i>	<i>SE</i>	<i>p</i>
Activism Intention			
on Group Identification	.52	.09	<.001
on Relative Deprivation	.30	.12	.012
on Group Identification*EMA	.20	.06	.001
Radicalism Intention			
on EMA	-.35	.10	<.001
on Activism Intention	.37	.09	< .001
Protest Behavior			
on Activism Intention	.38	.09	<.001

4 **Discussion**

5 As already shown in the previous study, Study 5 shows that EMA predicted the way
 6 people politically engage. EMA worked as a positive predictor, although this time through the
 7 interaction effect with group identification (see Figure 5), for peaceful, and as a negative
 8 predictor for radical protest intentions. Individuals with high EMA scores show comparably high
 9 peaceful protest intentions when they strongly identify with their unjustly treated group.
 10 However, they exhibit low protest intentions when ingroup identification was low. Talking
 11 Graham and Keeley's (1992) distinction between active, reformist and inactive, passive forms of
 12 loyalty towards a system, our results suggest that people with high EMA peacefully engage
 13 (reformist loyalty) as long as they care about their ingroup. If this is not the case, they seem to
 14 remain passive presumably because they believe that the system most likely will deal with the

1 problem anyway (passive loyalty). We also examined the link between political intentions and
2 actual behavior. We hypothesized that students with high protest intentions would be show more
3 protest behavior. Confirming this assumption, we found that peaceful protest intentions
4 facilitated personal effortful steps of engagement. Nevertheless, we found that peaceful and
5 radical protest intentions were correlated.

6 **General Discussion**

7 Political apathy and alienation are increasing in many Western countries (e.g., Algan,
8 Guriev, Papaioannou, & Passari, 2017; Crozier, Huntington, & Watanuki, 1975; Foster &
9 Frieden, 2017; Kotroyannos, & Mavrozacharakis, 2018; Mudde, 2013) thus putting democratic
10 functioning at severe risk. For example, in the aftermath of the economic crisis in 2008, many
11 people experience economic hardship and lost trust in the financial stability of the economic
12 situation (Lemoine, Darriet, Kmiec, & Roland-Lévy, 2016). Also, many people feel threatened
13 by fast changing societies, in which traditional norms and familiar ways of life vanish. In this
14 context of increasing uncertainty there are tendencies to blame politics and to attribute failure to
15 the government. Hence, the lack of trust is a well-known correlate of political drop-out and
16 alienation (Herring, 1989). However, if confidence in the problem-solving capacities of the
17 political leaders persist, constructive forms of civic engagement and the strivings for change are
18 enhanced.

19 While previous research (for an overview see van Zomeren et al., 2008) explored various
20 factors that instigate political behavior, the question regarding which form of action people show
21 to express their grievances remains an open question. We started the current investigation with
22 the observation that one key factor in this regard, that is, people's relationship with their political

1 representatives and system (e.g., Cichocka et al., 2008; Isemann et al., 2019; Jost & Banaji,
2 1994; Tausch et al. 2011), needs further theorizing as well empirical conceptualization.

3 In this paper paper we tackled these issues by introducing and examining the concept of
4 political loyalty as a core aspect predicting different forms of political behavior. Based on
5 Solinger et al.'s (2008) attachment approach, we hypothesized that political loyalty is a two-fold
6 construct consisting of an emotional attachment factor and a democratic value internalization
7 factor. Across five studies and 1106 participants, we found converging evidence for this two-fold
8 factor structure, its associated sub-concepts and its political behavioral correlates. Specifically, in
9 five lab and field studies using diverge samples across the political left-right spectrum, we found
10 supporting evidence that political loyalty is a reliable, valid and useful construct. Importantly, we
11 showed that political loyalty predicts specific forms, that is, violent vs. peaceful ways of political
12 engagement.

13 In Study 1, we found support for the theoretically driven factor structure of the loyalty
14 concept and its relation to political party orientation. Interestingly, we found that each political
15 party orientation was related to a specific profile pattern formed by subscales of the loyalty scale.
16 This means that the political loyalty scale may be used as a proxy to predict party orientation in
17 cases, in which people's party preferences cannot be directly assessed or in contexts, in which
18 this information is not available at all. In Study 2, we obtained evidence for convergent as well
19 as divergent validity of the loyalty construct by relating it to well-known concepts of political
20 psychology like political legitimacy and right-wing authoritarianism. In fact, we showed that
21 loyalty is meaningfully related, but by no means identical to these constructs. In Study 3, we
22 further advanced the validity of the loyalty concept by comparing right-wing and left-wing
23 political groups with respect to their particular factor profiles. This study also provided insight

1 into the political believe system of hitherto unexplored political groups like fraternities and
2 Antifa activists. In Study 4, we showed that one of the two loyalty factors, EMA, is positively
3 correlated with peaceful but negatively correlated with radical protest intentions. Furthermore,
4 EMA works as a moderator between group identification and peaceful protest intentions. This is
5 consistent with our theoretical consideration that affective bonds to the political system elicit
6 within-system engagement and block political behavior that is normatively inconsistent with the
7 political system. Finally, in Study 5 we replicated these findings and provided evidence that the
8 emotional facet of loyalty, EMA, is not only a predictor of political intentions but – in concert
9 with group identification – influences political action.

10 Taking these five studies together, we showed that political loyalty is a useful and
11 important concept that predicts different forms of political behavior reaching from party
12 orientation to peaceful engagement. Hence, we argue that political loyalty, people's binding to
13 their political leaders and government, is a core concept of political engagement and an
14 important factor that differentiates different forms of political behavior. Interestingly, by
15 distinguishing between an emotional and a cognitive facet of loyalty, we found that the
16 emotional factor EMA rather than INDEV is related with political behavior. This is consistent
17 with previous findings (e.g., Smith & Ortiz, 2002; van Zomeren et al., 2008) showing that affects
18 seem to be stronger predictors for political action than cognitions, thus highlighting the
19 importance of emotions and feelings in the domain of political behavior. In fact, early theorizing
20 already stressed important role of affective factors in predicting political behavior reaching as far
21 as to phenomena like racism and fascism (e.g., Adorno et al., 1950). However, affective
22 reactions are also predictive of prosocial behavior such as blood donation (e.g., Huddy & Khatib,
23 2007).

1 Although our conceptualization of loyalty clearly goes beyond previous research, it also
2 rests on it. For example, in previous research attachment towards one's societal system was most
3 often researched under the notion of ingroup bias (e.g., Adorno et al., 1950; Kosterman &
4 Feshbach, 1987; Pratto, Sidanius, Stallworth, & Malle, 1994), that is, as a consequence of
5 individuals trying to restore self-esteem (see Tajfel, 1981, 1982). In this respect, nationalism is
6 often defined as a form of country based ingroup bias (Druckman, 1994; Kosterman & Feshbach,
7 1989). In the current paper, however, we suggested to conceptualize a person's attachment to his
8 or her societal system as an attitude. As nuanced this distinction might appear, it has far-reaching
9 consequences regarding origin, scope, and consequences of the concept.

10 **Limitations and Avenues of Future Research**

11 One obvious restriction of our studies is that we only addressed loyalty and related
12 political behavior within a Western democratic country. However, it could be expected that the
13 variance in the loyalty variable is much higher in other countries that are more polarized and
14 even more diverse. Hence, it would be every important to test the predictive value of the loyalty
15 concept in these socio-political contexts.

16 A self-suggested further limitation is that we were able to relate loyalty just to a limited
17 amount of other politically meaningful variables. This implies that other high important factors
18 such as social dominance orientation (Pratto, Sidanius, Stallworth, & Malle, 1994) or political-
19 identity centrality (Federico & Ekstrom, 2018) were not taken into account. However, it could be
20 expected that social dominance orientation (Pratto et al., 1994), "the extent to which one desires
21 that one's in-group dominate and be superior to out-groups" (p. 742), shows negative
22 relationships with INDEV. Another important, albeit not tested factor in this respect is system
23 justification (Jost & Banaji, 1994; Jost & van der Toorn, 2012). Bridging the gap between our

1 findings and system justification research, future research might explore relationships between
2 political loyalty, system justification scales (e.g., Kay & Jost, 2003), and fundamental needs
3 (e.g., Hennes et al., 2012). In a recent paper Cichocka et al. (2018) found a negative quadratic
4 relationship between political engagement and system justification suggesting that a medium
5 system justification enhances political participation. Our findings, especially the results of Study
6 1, are consistent with these findings, as we found a quadratic function between left-right political
7 orientation and trust as well as constitutional patriotism, thus suggesting higher scale means in
8 the middle of the left-right political scale. Extending the finding of Cichocka et al., (2018),
9 however, our studies also indicate which specific political behavior people exhibit depending on
10 their particular configuration of subscales of the loyalty concept.

11 Finally, due to space limits we were not able to discuss all the political implications of
12 our findings – implication that may also be of interest for other disciplines like sociology,
13 philosophy and political science. For example, another symptom of the political turbulences
14 nowadays is the increasing number of illiberal democracies, in which the *rule of law* is
15 substituted by the *rule by law* as it is described by the law philosopher Klaus Günther (2019).
16 Rule by law means that the rule is strategically (mis-)used to fight political enemies and to
17 increase the own power. These illiberal democracies can be assumed to decrease citizen's loyalty
18 to a large degree. This makes clear that the topic of loyalty points to the heart of what is often
19 called the democracy crises and the rising of populism in many parts of the world. This crisis has
20 partly arisen due to a subjective lack of transparency and legitimacy – that is, a lack of loyalty
21 into politics and to the feeling that politics does not solve contemporary issues, like the widening
22 gap between the rich and the poor, or climate change. However, subjective feelings and emotions
23 are often overlooked and there exists no well-conceptualized measurement to address them. The

1 loyalty scale fills this gap and may also instigate research of how political issues are reflected
2 into individual differences thus connecting the micro, meso, and macro level of social sciences.

3 In sum our findings indicate that the affective facets of a person's loyalty to his or her
4 political system is an important factor in instigating peaceful engagement and preventing radical
5 behavior. None of the other well-known factors included in our study regarding political
6 engagement (perceived injustice, social identity) could better predict why people choose peaceful
7 over violent forms of political engagement. This knowledge might be of increasing importance,
8 not only for psychology that wants to remedy anti-democratic forces but also for agencies,
9 NGOs, and citizens concerned with the topic. However, because it is clear that all of these agents
10 are necessary to defend democratic constitutions, there is an immense need for research here.

11

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7. General Discussion

Inspired by Hobbes' (1651) philosophical argument of a social contract as the basis for peace, this dissertation contributes to a differentiated perspective of a person's attachment to a political system by highlighting it as a factor that reduces violence. This was demonstrated in four consecutive steps: First of all, the present dissertation emphasized attachment as a resource on an intergroup level. Research with incarcerated male youth from a German youth detention center provide evidence that attachment can strengthen resources like self-control, a well-known protective factor against violence (e.g., Baron, 2003). Violence-reducing influences of attachment were then examined on a societal level. Research with students from a German comprehensive school indicate that individuals who are attached to their political system act within the norms of it. Attachment to the democratic Federal Republic of Germany facilitated peaceful and prevented violent protest tendencies. In order to further elaborate and differentiate these findings, the concept of political loyalty was introduced. Political loyalty was defined as a positive attitude towards democracy. Considering attitude theories (e.g., Ajzen, 2001; Ajzen & Fishbein, 1980; Eagly & Chaiken, 1993, 1998; Hollander, 1971), a newly developed political loyalty questionnaire distinguishes between an affective (EMA) and a cognitive dimension (INDEV). Evidence across three studies confirm reliability and validity of the political loyalty questionnaire. Finally, former results of political system attachment as a moderator between normative and nonnormative forms of political engagement were replicated in a series of two experiments. A positive attitude towards the democratic Federal Republic of Germany facilitated peaceful and prevented violent protest tendencies. Going beyond previous research, however, the findings provide empirical evidence that in terms of collective action, this moderation is affectively (EMA) and not cognitively (INDEV) driven.

7.1. An Attitudinal Perspective on Political Engagement

This dissertation emphasizes the many advantages that an attitude approach brings to the field. Attitudes offer a clear structure and can be measured (e.g., Eagly & Chaiken, 1993, 1998; Thurstone, 1928). The concept of political loyalty, defined as a positive attitude to democracy with an affective and a cognitive component, helps to clarify current research on people's political system attachment (e.g., Easton, 1965, 1975; Gilley, 2006; Weatherford, 1992; Weber, 1958). Moreover, it has important implications for research on political engagement (e.g., Barnes & Kaase, 1979; Inglehart, 1977; Sabucedo & Arce, 1991), as the three components of attitude indicate that affect and cognition are different predictors of behavior (Allport, 1935; Eagly & Chaiken, 1993).

In this regard, a series of two studies provide empirical evidence that collective action is affectively and not cognitively driven. These results on a societal level are consistent with research on intergroup level (e.g., Pettigrew & Tropp, 2008; Stangor et al., 1991; Talaska et al., 2008), which shows that affects are generally stronger predictors of group behavior than cognitions. A possible explanation might come from Millar and Tesser's (1986) notion that affective components of attitude specially predict consummatory behavior, behavior that is rewarding in itself, while cognitive components predict instrumental, goal-directed behavior. In this vein, one could argue that although collective action serves a political purpose, it involves many non-instrumental aspects, such as social support and personal empowerment. In sum, the present findings demonstrate the usefulness of an attitude approach when it comes to researching political system attachment as well as political engagement. In particular, they show the importance of distinguishing between an affective and a cognitive component of political loyalty in predicting political engagement.

7.2. The Multidimensionality of Emotional Attachment to Democracy

Finally, the concept of political loyalty allows a differentiated empirical picture of the affective component of a person's political system attachment. In accordance with previous

research (e.g., Adorno et al., 1950; Bar-Tal, 1993; Knudsen, 1997; Kosterman & Feshbach, 1989; Schatz & Staub, 1997; Schatz et al., 1999), political loyalty empirically distinguishes between (constitutional) patriotic and nationalistic sentiments. Confirming the notion that nationalistic feelings can be seen as an unreflected form of system attachment, nationalism, unlike the other dimensions of political loyalty, was not correlated with political legitimacy but with RWA. However, together with trust and constitutional patriotism, nationalism worked as a positive predictor for peaceful and as a negative predictor for violent protest tendencies. As contradictory as these results may seem at first glance, it unveils a complex relationship between nationalistic sentiments and peaceful political engagement. The moderating effect was found in a rather left-wing students' sample. Since constitutional patriotism and trust are normally distributed and nationalism increases linearly across the political spectrum, nationalism is positively associated with the other affective dimensions on the political left. In a study by van Hiel, Duriez, and Kossowska (2006), aggressiveness directed against the established authorities was negatively related to RWA among left-wing extremists. In this respect, nationalistic sentiments, as problematic as they may be on the political right, could actually be a source of peace on the political left. Hence, with regard to possible influences of nationalistic sentiments, it is of great importance to take participant's political orientation into account.

7.3. Political System Attachment as a Peacebuilding Factor

The dissertation at hand underlines the importance of a liberal democracy as a political framework for a peacebuilding agenda, as proposed by Boutros-Ghali (1992, 1996). Specifically, it provides empirical evidence for the hypothesis that attachment to a political system facilitated normative and prevents nonnormative forms of political engagement (see also Booth & Seligson, 2009; Cichocka et al., 2018; Fennema & Tillie, 1999, 2001; Tausch et al., 2011). With regard to peaceful political engagement, Cichocka and colleagues (2018) already reported that this relationship is stronger in democratic regimes when compared to

nondemocratic regimes. In this sense, a democratic framework can be understood as a necessary condition of peacebuilding. However, it is not a sufficient condition, since studies (e.g., Cichocka et al., 2018; Tausch et al., 2011) as well as the data presented in this dissertation emphasize that the degree of people's attachment is another important prerequisite for peaceful behavior. In accordance with current political science literature (e.g., Krampe, 2016; Nilsson, 2012; Roberts, 2011; Rubin, 2006; Shepherd, 2015), I propose that efforts to strengthen people's belief in democratic structures should have a wider and more systematic scope of application on the UN peacebuilding agenda. A promising approach could be to focus on the perceived procedural justice of political governance. There is extensive literature (e.g., Sunshine & Tyler, 2003; Tyler, Fagan, & Geller, 2014; Tyler, Schulhofer, & Huq, 2010) suggesting that the attachment to systems can be significantly improved by strengthening the perceived fairness of decision-making procedures.

Going beyond this, the dissertation at hand stresses the multidimensionality of the phenomenon. Research (e.g., Schatz & Staub, 1997; Schatz et al., 1999) already shows that attachment to a liberal democracy can lead to very different behavioral results depending on the dimension. Schatz et al. (1999), for example, found that nationalistic sentiments towards the United States of America were positively associated with political disengagement while patriotic feelings were positively associated with multiple indicators of political involvement. This dissertation furthermore highlights the need to distinguish between affective and cognitive facets of political system attachment when it comes to predicting political engagement. In the organizational context, Konovsky and Pugh (1994) found that the emotion trust mediates the relationship between perceived procedural justice and constructive forms of behavior. In contrast, distributive justice, the fairness of the decision results, was not associated with trust. Consequently, it is crucial that future efforts to strengthen people's belief in democratic structures consider the multidimensionality of the construct as well as its different effects on outcomes.

7.4. Limitations and Avenues for Future Research

A first limitation of the present dissertation is that it has studied attachment to democracy only from the perspective of an independent variable. Of course, it can also be considered as a dependent variable. This reveals further advantages of an attitude approach. For example, there is extensive literature on how attitudes can be formed and changed (e.g., Gawronski & Bodenhausen, 2006; Halbeisen, Walther, & Schneider, 2017; Petty & Cacioppo, 1986). Edwards (1990) demonstrated that affect-based attitudes, attitudes that are formed affectively, exhibited more change under affective persuasion, while cognition-based attitudes, attitudes that are formed cognitively, exhibited change under both affective and cognitive persuasion. It raises the question of how political loyalty can best be addressed in terms of attitude change. Further important considerations regarding attitude change derive from cognitive dissonance research (e.g., Festinger, 1957; Festinger & Carlsmith, 1959), since it emphasizes that attitude-inconsistent behavior might eventually lead to attitude change. A promising field of research might therefore be to investigate possible influences of social movement participation on political loyalty. Moreover, there is research on the representation of attitudes in memory (e.g., Smith, 1998; Smith & Conrey, 2007). Smith and Conrey (2007), in this regard, stress that attitudes do not represent *traits* but rather *states* that differ as a function of the context. MacKuen and Brown (1987) already showed that citizens' political attitudes heavily depend on the content of current discussion. Hence, future research should examine how stable political loyalty is.

Besides missing research on political system attachment as a dependent variable, there are other limitations of this dissertation that need to be considered. For example, violence-reducing effects of political system attachment could only be shown with regard to collective action. Assuming Millar and Tesser's (1986) notion, that is, affective components of attitude predict consuming behavior and cognitive components predict instrumental behavior, is correct, future studies should investigate other forms of political engagement. Voting

behavior could, for example, be considered much more instrumental. Hence, INDEV rather than DEVI could therefore be a predictor of voting behavior.

In addition to violence-reducing effects in the context of political engagement, possible positive implications of political system attachment are conceivable in many other areas. In a first step, a strengthening of self-control through group attachment was demonstrated. Future studies should therefore not only focus on violence or political behavior, but should also consider possible influences of political system attachment on non-political behavior or human well-being. As already mentioned, groups can be a source of support (e.g., Mullen & Cooper, 1994), self-esteem (e.g., Smith et al., 1999), and even foster emotional and cognitive skills (e.g., Forsyth, 1990). It would be interesting to find out to what extent these effects can also be shown in terms of political system attachment.

In addition to this, future research regarding the political loyalty concept should furthermore include other lines of research and concepts. System justification theory (Jost & Banaji, 1994; Jost et al., 2003, 2004), for example, postulates that system-justifying beliefs contribute to the stability of injustice. The multidimensional concept of political loyalty now allows to investigate whether certain patterns of system attachment can be identified in this respect. In other words, is there a specific attachment style that is particularly vulnerable to the acceptance of injustice? Many authors (e.g., Klingemann, 1999; Norris, 1999; Puolimatka, 1995) have stressed the importance of *critical citizens* who respect democratic values but criticize existing political structures such as the government. In this regard, future studies should consider not only the dimensions of the political loyalty concept, but also possible discrepancies between them. For example, a positive relationship was found between the political loyalty subdimension nationalism and RWA. Many studies have already confirmed a strong correlation between RWA and prejudice (e.g., Altemeyer & Hunsberger, 1992; Duriez & van Hiel, 2002). This relationship could be further explored by, for example, clarifying the

question of whether nationalistic sentiments, the absence of patriotic sentiments, or the discrepancy between the two subdimensions is most predictive for prejudice.

Finally, the political loyalty questionnaire also needs to be further investigated and elaborated. Most of the samples used to validate the questionnaire were politically left, including student samples. Future studies should therefore should target more politically right samples to further validate the concept. Moreover, particularly with regard to INDEV, the question arises about other possible dimensions. This is due to the fact that items of the political loyalty dimensions were generated based on a literature review. Koch, Imhoff, Dotsch, Unkelback, and Alves (2016) argue that such theory-driven conceptualizations are problematic as they constrain concepts to the a priori fixed dimensions. The authors therefore present a data-driven approach based on multidimensional scaling that allows an estimation of spontaneously employed dimensions of a concept. It would be interesting to apply this data-driven approach to a person's attachment to his or her democratic system.

8. Conclusion

Probably Hobbes (1651) was right to pinpoint a social contract between citizens and their political system as a crucial factor for peace and unity of the human kind. However, the question arises as to the nature of such a contract. This dissertation provides a systematic analysis regarding violence-reducing effects of political system attachment. Research at an intergroup level showed that attachment to a social group can be a violence-reducing resource. At a societal level, results demonstrate that attachment to a democracy facilitate peaceful and prevent violent protest tendencies. Further deepening the understanding of political system attachment, the concept of political loyalty was introduced as a positive attitude towards a democratic system. Through this attitudinal approach, new insights could be gained, namely that affective rather than cognitive facets of attachment to democracy instigate peaceful and prevent radical forms of collective action.

Of course, there is still an immense need for research in this area. Nevertheless, a worthwhile endeavor. Citizens' trust in democracy has declined significantly in many parts of the Western world (Foa & Mounk, 2016). Europe faces a rise of so-called illiberal democracies (Zakaria, 1997); regimes that are democratically elected, but misuse their power to erode democratic values. Even in liberal democracies, fundamental rights are becoming increasingly restricted (e.g., Jarvis & Lister, 2013). At the same time, populist parties polarize societies (e.g., Oliver & Rahn, 2016). It is high time to counter these trends. However, this cannot be done without a profound understanding of citizens' attachment to their political system. This dissertation represents a step in this direction.

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S. D. Isemann developed the political loyalty questionnaire and the relative deprivation paradigm used throughout the studies. Testing and data collection were supervised by S. D. Isemann, who also performed the data analysis and interpretation under the supervision of E. Walther. Finally, S. D. Isemann drafted the manuscript. E. Walther and M. Dechesne continuously provided critical revisions for the different versions of the manuscript. E. Walther submitted the manuscript to the *Journal of Personality and Social Psychology*, in which it was recently rejected. The manuscript is now being prepared for further submission.

Declaration of Authorship

I hereby certify that this thesis has been composed by me and is based on my own work, unless stated otherwise. No other person's work has been used without acknowledgement in this thesis. All references have been quoted and all sources of information have been specifically mentioned.

Eigenständigkeitserklärung (deutsch)

Hiermit erkläre ich, dass die vorliegende Arbeit von mir und basierend auf meiner Arbeit entstanden ist. Keine andere Person war an der Erstellung beteiligt, die nicht in der Danksagung zu dieser Arbeit erwähnt wird. Alle Referenzen werden entsprechend zitiert und Daten aus anderen Quellen werden unter Angabe der Quelle als solche gekennzeichnet.

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