The Political Consequences of Be(com)ing Mindful. How Mindfulness Might Affect Political Attitudes

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Though research provides ample evidence that mindfulness shapes psychological processes and states that are linked to political attitudes and behavior, political science has so far largely ignored mindfulness as a potential explanatory factor shaping political attitudes and actions. This literature review aims to provide a comprehensive overview of the concept of mindfulness and outlines potential linkages between mindfulness and outlines political attitudes. I begin by identifying gaps in the literature on political attitude formation and change as well as its linkage to political behavior. I then introduce mindfulness as a *multifaceted concept*, discussing its definitional features and unravelling the *mechanisms of mindfulness* affecting cognitive and emotional abilities. Building on this foundation, I review research on correlates and effects of mindfulness on *attitudes and behaviors related to the political domain*, such as pro-environmentalism and pro-social behavior. Critically reflecting on extant research on mindfulness, I propose possible research avenues for political science that enhance its dialogue with neuroscience and social psychology.

Keywords: mindfulness, political attitudes, political psychology, empathy, emotions, emotion regulation

INTRODUCTION

What shapes political attitudes? What makes a Liberal, what a Conservative? Why do we think what we think? For decades, political ideology, attitudes, and preferences have been considered to be the result of rational decision-making processes. Individuals have transitive preferences which they are fully aware of, engage in processes of careful deliberation, weigh costs and benefits to reach decisions that serve their pre-defined self-interest, so the premises (Becker, 1976). One after another, these basic assumptions collapsed: people rarely have accurately sorted, consistent preferences (Kahneman, 2003), are, on average, poorly informed about politics (Converse, 1964; Delli Carpini and Scott, 1996), and deliberately make decisions that are at odds with their alleged self-interest (Thaler and Cass, 2007). Rationality is bounded, at best (Green and Shapiro, 1994; Friedman, 1996; Kahneman, 2003).

Searching for new explanations, researchers shifted focus from the outside to the inside. From external factors, such as education, social identity, or media, to internal systems of information-processing. Taking advantage of neuroscientific advances, political scientists began to discern the linkage between emotions and attitudes (McDermott, 2004). They shed light on the mediating role of cognitive processes and emotional abilities, such as empathy, and explored the effect of emotion regulation strategies on political attitudes (Blinder and Meredith, 2018). This mounting evidence suggests that political attitudes and actions are not primarily intentional choices but rather results of intertwined processes of emotion and cognition.

Biases in gathering, perceiving, and processing information add another layer of complexity. Prior attitudes combined with mechanisms that aim at reducing cognitive dissonance make us privilege

information that reinforces our previous beliefs (Burdein et al., 2006; Druckman and Arthur, 2016; Nyhan and Reifler, 2015). These biased patterns of information-seeking and processing have consequences: new information is not considered symmetrically and thus not affecting our attitudes to the degree it probably should. Attitudes toward climate change are one of the best examples. More information about climate change does not move people toward the scientific consensus. Traditional approaches to science communication hit the invisible wall of biased processing.

The interaction of prior attitudes, emotions, and cognitive processes resembles a Gordian knot. None of its ties can be loosened separately from the others. Unraveling this web is not only an endeavor of academic relevance, it is of utmost societal importance if we want to address two of the most pressing problems of our time: political polarization and climate change. Political science has only begun to pay tribute to the complexities of the human mind, leaving us with few insights in the inner antecedents of political attitudes.

What we know is that neurological processes, primed for survival, decide whether we take 'heated' decisions or cool-headedly weigh off pros and cons. We know that the intention-behavior gap widens (Chatzisarantis and Hagger, 2007) and habitual responding increases (Wenk-Sormaz, 2005), once intense emotions take over control–thus detaching political actions from attitudes and proliferating in-group bias (Kahneman, 2013). We know that the way we relate to other's emotions, known as empathy, affects our political attitudes and actions (Loewen et al., 2017). Yet, we still know little about how to influence these neurological mechanisms that set us on 'auto-pilot', that let us take decisions we eventually regret once the perceived threat has faded. We know even less about the political dimension of these tracks for intervention, such as emotion regulation strategies, and are far from making use of them. In short, we are everything but well-equipped to escape the emotional traps, (political) life sets up.

At the same time, natural sciences are taking huge interest in an innate human capacity that could be of interest in this regard: mindfulness. The ability of "paying attention in a particular way: on purpose, in the present moment, and non-judgmentally" (Kabat-Zinn, 1994, 4) affects the way we experience and relate to our emotions (Hölzel et al., 2011). While originally applied to a wide array of clinical conditions[1], the extensive effects of Mindfulness-Based Interventions (MBIs) attracted attention of the wider public in recent years. With neuroscientists uncovering the causal linkages between mindfulness practice and its healing properties, the magnitude of practicing "bare attention" (Epstein, 1995) became visible. MBIs have consistently been found to reduce measures of perceived stress (Jain et al., 2007; Momeni

et al., 2016), anger (Momeni et al., 2016), rumination (Deyo et al., 2009), negative mood states (Jha et al., 2010; Kiken and Shook, 2014), perceived threat (Niemiec et al., 2010), and anxiety (Greeson and Brantley, 2009) while at the same time improving positive outlook (Jain et al., 2007). These very same states and emotions have been found to be related to both political attitudes and political behavior. Yet, with political science only beginning to understand the explanatory potential of psychological processes, mindfulness has barely received attention in the political domain.

This literature review aims to facilitate research at the mindfulness-politics nexus by providing an overview of psychological antecedents of political attitudes and behaviors on the one hand and a (selective) outline of correlates and effects of mindfulness on the other hand. Weaving together these strands of research, avenues for future explorations appear.

The remainder of the paper is structured as follows: a first section identifies gaps in the literature on political attitude formation and change[2] as well as its linkage to political behavior. A second section introduces mindfulness as a multifaceted concept, discussing its definitional features and unravellingolling the mechanisms of mindfulness affecting cognitive and emotional abilities. Building on this foundation, a third section outlines existing research on correlates and effects of mindfulness on attitudes and behaviors related to the political domain, such as pro-environmentalism and pro-social behavior. A fourth section critically reflects on extant studies on mindfulness and outlines potential avenues for future research.
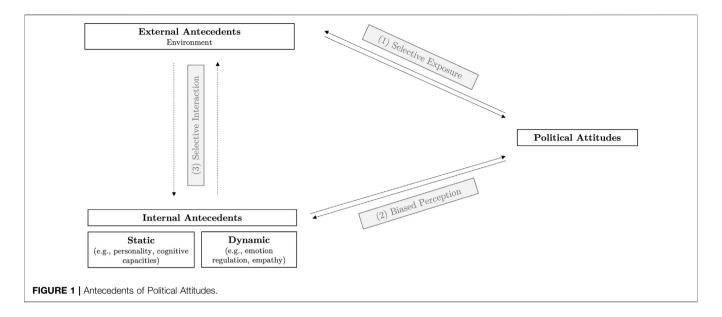
WHY WE THINK WHAT WE THINK: EXPLORING THE ANTECEDENTS OF POLITICAL ATTITUDES

Political attitudes[3] govern our lives: what we consider "freedom", how we approach "equality", where we draw lines separating in-groups from out-groups are more than abstract deliberations. These attitudes, "evaluat [ions of] a particular entity with some degree of favor or disfavor" (Eagly and Shelly, 1993, 47), guide tangible choices we take on a daily basis. Influencing whether we view immigration as obstacle or opportunity; how we solve dilemmas of collective action; or whom we consider an authority–attitudes affect our interaction with others far beyond the political sphere.

Given their centrality in both daily life and the democratic process, it does not come as a surprise that the question of how attitudes form and change is one of the most enduring topics in the fields of political science and social psychology alike. The

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[1]Mindfulness-based therapies are successfully used to reduce depression symptoms (Strauss et al., 2014) and relapse (Kuyken et al., 2015), anxiety disorders (Goldin and Gross, 2014), addictive behaviors (Bowen et al., 2014), are efficient in treating chronic pain (Cherkin et al., 2016), fibromyalgia (Grossman et al., 2007) or skin disease (Kabat-Zinn and Light, 1998), and effective in increasing immune functioning (Davidson et al., 2003).

[2]Separating attitude formation from attitudinal change has proven to be an heuristic of little value (Druckman and Arthur, 2016).

[3]While recognizing the important subtleties and differences in meaning and measure between attitudes, beliefs, opinions, and ideology, I do not differentiate between them in the course of this review as it is not necessary to advance the core argument. Individual attitudes, their subdimensions such as opinions and overarching ideologies share the same psychological foundation, I focus on.

FIGURE 1 | Antecedents of Political Attitudes.

ensuing section provides a rough-grained picture of the antecedents of political attitudes that helps to identify different strands of explanations, their interdependencies as well as loose ends calling to be tied up. To this endeavor, explorations into the causes and correlates of political attitudes can be thought of clustering along three lines (see **Figure 1**): external factors, internal factors, and processes mediating their relationship.

External Factors: How Our Environment Shapes Us

A first line of literature portrays attitudes as products of external influences. This research is based on the assumption that exposure to different shades of reality shapes our perception of what is right or wrong, what is desirable or to be avoided. Early research focused on a narrow understanding of socialization positioning family transmission center-stage. The premise: people inherit political attitudes from their parents and show little deviation from them over the span of a lifetime (for an overview, see Weiss, 2020). Increasing variation of political attitudes within families posed a challenge to this explanation, leading to a broadening of the view.

Today, socialization research encompasses a wide array of situational and environmental factors that frame individual experiences, condensing them into attitudes. Ranging from parenting styles, religion and education over patterns of media consumption and aspects of social identity to partisanship and elite cues, external influences are suggested to shape individual's attitudes (for an overview, see Hatemi and McDermott, 2016).

Internal Factors: Why Our Inner Life Is Political

A second line of research shifts the focus from external to internal factors affecting political attitudes (see **Figure 1**). While the static approach focuses on the explanatory potential of supposedly fixed

structures, such as brain region activity or personality, the dynamic approach highlights the processes and abilities that shape the interaction with the environment, for example the effect of emotion regulation or empathy on political attitudes.

The *static approach* to the inner antecedents of attitudes twists the early transmission hypothesis, arguing that attitudinal correlations between parents and children are, at least to some extent, biological in nature. Structural differences in the neurobiological architecture, such as the size and activity of brain regions associated with the capacity to tolerate conflict and uncertainty (Amodio et al., 2007), management of fear (Amodio et al., 2007; Kanai et al., 2011) or the response to adverse stimuli (Oxley and Douglas, 2008; Renshon and Tingley, 2015) account for a substantial portion of the variation in political attitudes. Personality trait research takes the same line: individual dispositions, largely stable over the lifespan, affect political attitudes. Research on the personality-attitude nexus suggests that individuals characterized with a high need for certainty and security likely hold conservative attitudes, while citizens showing needs for novelty and complexity as well as a higher tolerance of ambiguity are attracted by liberal worldviews (Jost et al., 2003)–especially in the sociocultural domain (for an overview, see Johnston and Julie, 2015). Findings on the relationship between the Big Five personality traits–capturing these need structures of individuals–and political attitudes mirror these findings: Openness to Change is positively related to liberalism (Mondak, 2010). However, whether personality traits affect attitudes independently from biological predispositions (Hatemi and McDermott, 2016) and how environmental factors mediate this relationship (Jost et al., 2009) remains contested. Importantly, the static approach to attitudes suffers from a major shortcoming: it is correlational in nature. Since neither brain, nor personality structure can be manipulated on purpose, this limitation is not realistically surmountable.

With this limitation in mind, scholars turned to *dynamic internal processes and abilities* that govern our interaction with the world surrounding us. As the subsequent section outlines, individual differences in how we emotionally perceive stimuli and regulate these emotions were found to be related to political attitudes. Moving beyond the static understanding of our inner dimension, research in this vein contributes to our understanding of attitudinal change–and perhaps even has the potential to unveil the mechanisms linking dispositions and attitudes.

Emotions and Emotional Valence

Day-to-day politics reveal an omnipresent entanglement of emotions with politics: anger takes people to the streets; fear drives obedience; rage turns into violence. As a consequence, these basic emotions–*anger, fear, anxiety, and perceived threat*–received considerable attention in social and political psychology. While all four of these emotions result from confrontation with potential threats, their political consequences differ.

Anger has been linked to a wide array of conservative attitudes, for example increased support for punitive policies to solve social problems (Gault and John, 2000); reduced risk perception resulting in a higher likelihood to support warfare (Huddy et al., 2007); heightened resistance to redistributive policies such as affirmative action (Banks, 2014); and increased support for populist radical right parties (Vasilopoulos et al., 2019; Rico et al., 2020).

Complementary to this direct effect, anger seems to be indirectly related to political attitudes as it affects the exposure to and processing of information. First, anger seems to inhibit interest in new political information (Valentino et al., 2008), thereby reducing the permeability of filter bubbles. Second, and closely related, dissonant information that enters the attentional spectrum is more likely to be discarded (Suhay and Erisen, 2018) while it increases susceptibility to misinformation that is in line with one's previously held attitudes (Weeks, 2015; Fridkin and Gershon, 2020). Put differently, when anger sets in, individuals put up shields their cognitive shields–and refuse information that contradicts their beliefs.

By contrast with anger, *fear and anxiety*[4] are found to increase risk aversion (Huddy et al., 2005) resulting in enhanced information-seeking and a reduced use of cognitive heuristics such as party identification and ideology. This, in turn, makes individuals more likely to question their prior attitudes and reduces support for extreme political options (Vasilopoulos et al., 2019). On the flipside, fear reduces individual's confidence in their own preferences and choices, making them more vulnerable to external manipulation (Gadarian et al., 2014).

Antecedent to both anger and fear, *perceived threat* is found to be predictive of conservative policy preferences when confronted with a potential threat, be it a migrant (Renshon and Tingley, 2015) or a terrorist (Huddy et al., 2005). With law-and-order policies offering a safe haven in the troubled waters of uncertainty (Jost et al., 2017), the linkage between threat and conservative

attitudes seems reasonable. Eadeh and Chang (2020), however, point to an asymmetry in the type of threats considered: priming threats that are not part of the 'core business' of conservatism, such as health-care access, pollution or corporate misconduct, support for liberal policies increases support. Hatemi and McDermott (2020) take the same line, calling for a differentiated view on the effects of fear on political attitudes.

Another emotional reaction to potential threats operates on a more subtle level but yields similar political effects: *disgust*. Evolutionary developed as a mechanism to protect the body against pathogens–and thus to secure survival–disgust is shown to affect preferences and behaviors seemingly unrelated to threats of contamination. Correlational studies suggest that differences in skin color are misconceived as cues to infectious diseases, and inter-racial or same-sex marriages as potential mechanisms of contagion: high levels of behavioral immune sensitivity (*trait* disgust) are associated with opposition to same-sex marriage, pre-marital sex, and abortion (Inbar et al., 2009a) as well as hostility toward social outgroups, such as immigrants (Aarøe et al., 2017), foreigners (Hodson and Costello, 2007), homosexuals (Inbar et al., 2009b), and criminals (Jones and Fitness, 2008).

The behavioral immune system does not only shape baseline attitudes but also interferes with cognitive processes involved in decision making. Aaroe et al. (2017) show that this pathogen avoidance mechanism reduces people's sensitivity to objective information. When asked about their immigration attitudes, participants with high disgust sensitivity were significantly less likely to respond to an information treatment manipulating immigrant's willingness to integrate. Disgust overrode cognition. Pro-social signals that facilitate peaceful coexistence were not taken into consideration, once the behavioral immune system detected a potential threat.

This overview of the effects of emotions on political attitudes is far from exhaustive. Yet, it serves to highlight two points. For one, the relationship between emotions and attitudes is complex. Sensitivities to context and interactions with cognitive processes call for increased attention. For another, the explanatory power of emotions with regard to attitudes is too large to ignore: with an effect size as large as education–a standard explanation of attitudes–in the case of disgust (Aarøe et al., 2017), emotions have the potential to drastically influence attitudes directly. In addition, emotions affect attitudes indirectly as especially "high-motivation emotions such as disgust lead to attentional narrowing and decreased attention to peripheral information" (Clifford and Jerit 2018, 267) and thereby engender selective processing (see Section *The Attitude-Internal Nexus: Biased Processing*).

Time has passed and research has moved on since McDermott called for caution in stating that "like the proverbial white elephant, to the extent that we ignore the existence and impact of emotion, it will continue to exert a systematic, unspoken, and pervasive impact on decision making" McDermott (2004, 702). And yet, our understanding of the political impact of emotions remains fragmentary.

Emotion Regulation

Even more rudimentary than our knowledge about the differences in how we *experience* emotions are insights in the

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[4]While both emotions can be conceptualized as reactions to external threats and are often used interchangeably, fear pertains to clearly delineable threats whereas anxiety is associated with ambiguous threats (see Brader and Marcus 2013).

political consequences of the way we regulate them. Emotion regulation (ER) determines whether certain emotions arise, when they arise, how long they prevail, and how they determine our behavior (Tang et al., 2019). As such, ER serves as an umbrella term for a wide array of implicit and explicit strategies for altering emotional responses (Hölzel et al., 2011). These strategies can be distinguished according to their location in the emotion-generative process, i.e., the point in time when emotions are regulated. In this regard, a distinction between response-focused and antecedent-focused strategies is of heuristic value.

Response-focused strategies aim at manipulating behavioral reactions to emotions once they occurred. Most prominent among these, expressive *suppression* simply conceals one's feelings without attempts to alter them. While being beneficial in certain instances, mounting evidence suggests that suppression entails a number of maladaptive effects, such as a decrease in the experience of positive emotions, impaired information recall, as well as a higher likelihood of disruption of social communication and major depression (for an overview, see Chambers et al., 2009).

Antecedent-focused strategies, in contrast, come into play at an earlier stage, manipulating the input of the emotion-generative system. This involves situation selection (exposure), the control of attentional deployment, as well as the re-evaluation of the situation to change emotional valence or salience (Chambers et al., 2009, 565). Cognitive re-appraisal (i.e., reinterpreting the meaning of an emotive stimulus to modify the emotional impact) has proven more adaptive than suppression to a variety of emotions, such as disgust, sadness, and distress (Gross, 2001) and is found to reduce self-reported and behavioral indications of negative emotions such as anger (Mauss et al., 2007).

Scholars investigating the effect of different emotion regulation strategies on political attitudes, (Lee et al., 2013), provide correlational and experimental evidence for a relationship between the use of an antecedent-focused strategy, *reappraisal*, and political liberalism. Survey respondents applying reappraisal strategies as well as participants under reappraisal treatment are significantly more likely to support liberal policies and self-identify as liberal. The effect of *emotional abilities*, a broader framework encompassing the identification, understanding, as well as regulation of emotions, points into the same direction: emotional abilities are significantly positively related to socio-cultural as well as economic left-wing attitudes (Van Hiel et al., 2018).

Halperin et al.'s (2013) findings on the effect of reappraisal on intergroup affect uncover a potential mediator of this effect on political attitudes: pro-sociality. In a laboratory experiment, participants instructed to respond to anger-inducing stimuli in a detached and analytical manner (cognitive reappraisal condition) reported significantly less anger toward out group members and more support for conciliatory policies compared with participants in the control condition that were asked to respond naturally. These findings travel to the real world. As a follow-up study on the reaction of Israeli participants to the Palestinian's bid to the UN seeking full membership reveals: following a 30 minute reappraisal instruction, participants under treatment reported significantly lower levels of negative emotions toward Palestinians and were more supportive of conciliatory policies than control participants. This effect was replicated in the Colombian context where a reappraisal treatment was found to increase support of reconciliatory policies toward the FARC (Hurtado-Parrado et al., 2019). Halperin et al. (2014) echo this finding, revealing that–mediated by a decrease in negative emotions and an increase in support for general democratic values–cognitive reappraisal reduces levels of political intolerance.

Taken together, these findings suggest a pervasive effect of emotion regulation strategies on the political domain: simple reappraisal techniques significantly increase support for reconciliatory policies and political tolerance, reduce the willingness to limit the political rights of disliked out-group members, and strengthen democratic values. Being able to effectively regulate emotions seems to allow one to draw attention to the broader meaning and consequences of events, leading to a more balanced perspective that "reconnect [s] people with their core values and beliefs" (Halperin, 2014, 1,130–31). Research on emotion regulation has, however, hardly crossed disciplinary boundaries, with social sciences only beginning to assess the implications of this self-regulatory mechanism for the political and societal sphere.

Empathy

Located at the intersection between emotions, traits, and cognitive abilities, another dimension of individuals' inner lives attracted political scientists' attention: *empathy*. Research suggests that understanding thoughts and sharing feelings of others has wide-ranging consequences for navigating social situations, including the political sphere. Studies reveal that individuals with greater empathic capacity are more likely to identify as liberal (McCue and Gopoian, 2000) and with parties of the political left (Loewen et al., 2017). Differences in the capacity for empathy are also predictive of close correlates of political ideology. Empathy is positively related to the endorsement of supportive vs. punitive social policies (Gault and John, 2000) and redistribution (Loewen et al., 2017), and negatively predicts social dominance orientation and prejudice (Bäckström and Björklund, 2007).

Others have argued that differences in the expanse of empathy are context-dependent: liberals and conservatives do not differ in their capacity to empathize with those close by (i.e., the family) but only if the circle widens (Waytz et al., 2016). Both liberals as well as conservatives are more likely to judge ingroup (vs. outgroup) members worthy of empathy (Hasson et al., 2018). Liberals' ingroup simply seems to be larger leading to higher scores on self-report measures of empathy with mixed or unspecified target populations.

Effects of empathy on political behavior, are, however, contested. While some identify empathy as key component in conflict resolution processes by reducing intergroup and interpersonal conflict and proliferating reconciliatory solutions (for an overview, see Halperin, 2016), recent research strikes a bitter note: dispositional empathy might fuel affective polarization through a disproportionately increased outgroup antipathy (Simas et al., 2020).

Insights into these dynamic internal processes and trainable abilities that affect attitudes are a valuable complement to the external approach of attitude formation and change and the static understanding of our inner dimensions. And yet, these two perspectives have one crucial point in common: the suggested direction of causality. Both agree that attitudes are the products of given structures or processes–whether external or internal; attitudes are treated only as dependent variables. This assumption is challenged by a third strand of research.

Interdependency: Why Our Inner and Outer Lives Are Not Separate

A growing literature suggests that attitudes, external, and internal structures are bound together in a mutually constitutive process. Attitudes shape the environment that we find ourselves in, affect the way, we perceive it, and change how we process information from it. The following section takes a look at each of these interactions in turn.

The Attitude-Environment Nexus: Selective Exposure

First, attitudes (re-)structure our environment (see **Figure 1**). Think about whom you share a bed, eat your meal, spend your leisure time with. Most likely these are people quite similar to you. This is no coincidence. People gravitate toward like-minded others, minimizing conflict and reinforcing their values (Harris, 1995). Hence, the social world that we inhabit is not only shaping us–we are also shaping it: our attitudinal similarity with partners and friends is in large part due to self-selection rather than assimilation (Lee et al., 2013). The same applies to our choice of media outlets: what we read, watch on TV, and listen to on the radio is most likely resonating with our prior political attitudes (Stroud and Jomini, 2010). Again, we seek out like-minded views to reduce cognitive dissonance (Kunda, 1990), tying the filter bubbles, we reside in ever closer.

The Attitude-Internal Nexus: Biased Processing and Perceiving

Moving one step further, discordant information permeating this exposure filter is not evaluated impartially. A variety of emotional and cognitive processes bias our engagement with it (see **Figure 1**). Hence, to reduce cognitive dissonance, individuals tend not only to gather but also to process new information in a way that reinforces their previous beliefs (Burdein et al., 2006; Nyhan and Reifler, 2015; Druckman and Arthur, 2016). We recall confirmatory information far better than counter-attitudinal information (Lodge and Hamill, 1986), uncritically accept information that suits our beliefs, and reject what might cast doubt on them. Resulting misperceptions impede the political discourse and hinder informed decision-making (Flynn et al., 2017). Education and political knowledge are far from safeguarding us from these instances of 'motivated reasoning'. On the contrary, effects are most pronounced amongst the highly sophisticated (Taber and Lodge, 2006).

These two dimensions of selectivity our choice of the environment, we live in and the ways in which we handle information confronted with–are mutually reinforcing.

Inhabiting a social sphere of attitudinal homogeneity reduces the exposure to contradictory information and at the same time fortifies our interpretation of reality. The same applies vice versa: eager to avoid dissonant information, we sort ourselves into the best-fitting environment.

The Internal-External Nexus: Selective Interaction

These asymmetries in exposure to and processing of information are reinforced by another interaction: how we experience and relate to our inner life affects how we relate to and choose our environment. The intensity and valence of emotions sets the tone for our interaction with the social world we are living in. While some emotions, such as joy and contentment, enhance interaction across group-boundaries, others (e.g., anger and fear) reduce social contacts to closer circles (see Section *Emotions and Emotional Valence*). On a similar note, the ability to effectively regulate emotions affects the exposure to the environment. Being able to tolerate unpleasant states makes "experiential avoidance [. . .] less automatic and less necessary" (Hayes, 2002, 104), resulting in a more diverse social environment. Hence, our internal states and processes shape the exposure to and interaction with our environment (see **Figure 1**).

What this third strand of attitude research suggests is that we are confronted with a complex picture. Our environment as well as our inner capacities shape our attitudes. Our attitudes, in turn, shape our inner and outer lives; affect which environment we choose to live in; how we perceive the world surrounding us; and whom we interact with. Paying tribute to this complexity, research has advanced considerably during the last decades. It moved from external to internal structures, closing the circle by identifying their interdependent processes. And still, we are faced with a rough-grained picture of the antecedents of attitudes only. The interdependency of attitudes, environment, and biology calls for more attention.

Understanding the antecedents of attitude formation and change is not only of scientific but also of social relevance. If we want to address the major challenges of our time, such as societal polarization and climate change, we must understand how to crack open self-referential echo chambers. While fixed attributes of individuals' environment are hardly amenable to change, cognitive and emotional processes are. Discerning the mechanisms underlying biased exposure to and processing of information helps understand why attempts to alter attitudes hit invisible walls and how sweet spots of openness to change can be tapped. It also helps understand why attitudes are resistant to information that would–from a perspective of (economic) rational choice theory–have to induce a drastic change. Put more bluntly, it helps better understand one of the foundational tenets of democratic citizenship: the (boundaries of the) ability of citizens to take informed decisions.

SEARCHING FOR INSIGHT(S): MINDFULNESS

Searching for ways to circumvent these mutually reinforcing mechanisms of selectivity, *mindfulness* comes into view. Extant

research on the ability of "paying attention in a particular way: on purpose, in the present moment, and non-judgmentally" (Kabat-Zinn, 1994) reveals that mindfulness affects the way individuals expose themselves to, experience, and process external stimuli and situations. The following section introduces the concept of mindfulness, outlines mechanisms of be(com)ing mindful, and discusses its potential in the political sphere.

What Is Mindfulness? Approximations to a Metamorph

In public discourse, mindfulness often refers to practices of meditation, to states of calmness, serenity, and well-being, to Buddhism, and to a positive view on life. None of these interpretations is wrong per se but separated from the bigger picture, this view on mindfulness remains incomplete. Things hardly change if we shift focus to the academic sphere: despite the exponential increase in scientific interest (van Dam et al., 2018) and concerted efforts to define mindfulness (Bishop et al., 2004; Brown et al., 2007; Hölzel et al., 2011; Malinowski et al., 2013), ambiguity persists.

Yet, out of all definitional attempts, two core features crystallize: attention and attitude (Bishop et al., 2004; Baer et al., 2006; Shapiro et al., 2008; Hölzel et al., 2011; Creswell, 2017). Paying *attention* to the current experience in a given situation forms the foundation of mindfulness. Observing and attending to the changing field of sensations, thoughts, and emotions from moment to moment enables one to be fully present and alert to what is happening in the here-and-now. To be able to focus on this very moment, it is necessary to *regulate attention*. For one, a certain degree of sustained attention is required to remain vigilant over prolonged periods of time. As thoughts will inevitably begin to wander, switching is another skill needed to be present in this moment. This process of constantly bringing attention back from ruminations and thoughts to the chosen object of attention, the breath for example, fosters a non-elaborative awareness. Rather than getting caught up in thoughts about thoughts, rather than inventing stories around emotions, rather than investigating the origins of sensations, attention focuses on the direct experience of events. In this regard, thoughts are objects of observation (Bishop et al., 2004, 232). Shifting perspective from subject to object, "experience becomes less personal and subjective, allowing the practitioner to see with greater clarity and objectivity" (Shapiro et al., 2012, 511).

The *attitude* toward this process of awareness is the second definitional feature of mindfulness. Watching thoughts and sensations–irrespective of their valence and desirability–with curiosity and openness fosters a nonreactive orientation that again enables attention. If thoughts, sounds, and sensations that come into the field of awareness are observed as if they occurred for the very first time rather than being labelled and classified, the experience widens. This quality, often referred to as 'beginner's mind' allows one to hold both pleasant and unpleasant experience in awareness (e.g., Kabat-Zinn, 1994). Thus, information–otherwise filtered through beliefs and expectations–can be recognized in its breadth and processed

adequately. As such, mindfulness can be considered a "process of gaining insight into the nature of one's mind and the adoption of a de-centered perspective on thoughts and feelings so that they can be experienced in terms of their subjectivity (versus their necessary validity) and transient nature (versus their permanence)" (Bishop et al., 2004, 234).

These two definitional components, attention and attitude, can be understood as the smallest common denominator of conceptualizations of mindfulness. Kabat-Zinn's (1994, 4) most prominent attempt to define mindfulness sticks close to these core features, construing mindfulness as the capacity of "paying attention in a particular way: on purpose, in the present moment, and non-judgmentally". Similarly, Brown and Ryan (2003) conceptualize mindfulness one-dimensionally, consisting of a single factor they describe as awareness of and attention to present events and experiences[5]. More recent conceptualizations disaggregate the construct, providing a *multidimensional* picture of mindfulness. Putting previous self-report measures under scrutiny, Baer et al. (2006, 2008) identify five facets of mindfulness: observing, describing, acting with awareness, nonjudging of inner experience, and nonreactivity of inner experience[6]. Discerning between different dimensions of mindfulness allows for both assessing differential effects of and correlations with conceptually close constructs (e.g., self-compassion, emotion regulation). To further complicate things, mindfulness is not only referred to as trait-like quality, but also as state, skill, practice, and intervention.

How to reconcile these perspectives? Here, I understand mindfulness as a quality inherent to all human beings, which varies across individuals (*trait*) and over time (*state*). These inter- and intra-individual differences are shaped by mindfulness as a *skill* that can be developed with *practice*: deliberately cultivating awareness of the present moment increases the ability to do so. *Interventions* are formats encouraging practice, most prominently the 8-week Mindfulness-Based Stress Reduction (MBSR) and Mindfulness Cognitive Therapy (MBCT) courses, and fostering (short-term) gains in state and (long-term) increases in trait mindfulness (for a discussion, see van Dam et al., 2018).

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[5]Accordingly, their proposed approach to measurement, the Mindful Attention and Awareness Scale (MAAS) yields a single measure. The Freiburg Mindfulness Inventory (FMI; Walach et al., 2006) similarly assumes mindfulness to be a one-dimensional concept and is accordingly designed to assess mindfulness amongst experienced meditators.

[6]*Observing* refers to noticing and attending to internal as well as external experiences, such as thoughts and emotions or sounds and smells (e.g., I notice the smells and aromas of things). *Describing* is the ability to put internal experiences into words (e.g., I am good at finding words to describe my feelings). *Acting with awareness* pertains to the degree to which attention rests upon one's activities of the present moment in contrast to acting on automatic pilot, i.e., habitually (e.g., I find myself doing things without paying awareness attention). *Nonjudging of inner experience* concerns the nonevaluative attitude toward experiences (e.g., I think some of my emotions are bad or inappropriate and I should not feel them). *Nonreactivity to inner experience* is the ability to let go of thoughts and feelings without getting caught in them (e.g., I perceive my feelings and emotions experience without having to react to them) (Baer et al., 2008).

With this definitional sketch in mind, why should political scientists care? (How) does non-judgmental awareness relate to the political sphere? Research suggests that mindfulness correlates with or affects a number of emotional and cognitive processes and abilities that are linked to political attitudes. The following section outlines the mechanisms linking mindfulness to attitude research.

Mechanisms of Mindfulness. How Mindfulness Might Change (Political) Thoughts and Feelings

On a general note, the practice of non-judgmentally paying attention with openness leads to a *shift in perspective* (Shapiro et al., 2008; also referred to as decentering, see Vago and Silbersweig, 2012 or detachment, see (Tang et al., 2015)). Resting in awareness, one is able to dis-identify from the content of thoughts, sensations, and emotions, realizing that: "the phenomena contemplated are distinct from the mind contemplating them" (Goleman, 1980, 146). Shapiro et al. (2008) suggest that this process of re-perceiving constitutes a meta-mechanism of mindfulness that lays the foundation of three highly interdependent (second order) processes: emotion regulation, attention regulation, and change in the perspective on the self. I briefly discuss each of these processes below.

Mindfulness and Processes of Emotion Regulation and Attention Regulation

Research established various conceptual links between ER and mindfulness, building on the ability of mindfulness meditation to shape content and quality of awareness. Attending to emotions in the present moment, regardless of their valence and desirability, enables individuals to step back and recognize the transient nature of feelings: "Holding one's painful thoughts and feelings in balanced awareness rather than over-identifying with them" (Neff, 2010, 223) opens up space previously occupied by interpretations and anticipations. The ability to attend to the uniqueness of the situation, from moment to moment, improves the assessment of what is necessary and useful–and thus widens the "thought-action repertoire" of individuals (Fredrickson, 2003).

Changing one's relationship with experiences, mindfulness is thus assumed to induce a shift from response-toward antecedent-focused emotion regulation strategies. Whenever thoughts and emotions are accepted as part of the present-moment experience, behavior toward them changes. For one, mindfulness training reduces over-engagement with thoughts and emotions, i.e., *rumination* (Ramel et al., 2004; Jain et al., 2007; Deyo et al., 2009). For another, by fostering a non-judgmental stance toward inner and outer experiences, mindfulness encourages engagement with unpleasant sensations. Thus, mindfulness practice is found to counteract *suppression* (Roemer et al., 2009; Roemer et al., 2015) as well as *experiential avoidance* (i.e., the unwillingness to experience feelings, thoughts, and sensations and attempts to alter them, see Mitmansgruber et al., 2009). Vice versa, this implies that the willingness to expose oneself to uncomfortable emotions and sensations

increases. As Arch and Craske (2006) show, participants, who underwent a 15 min breathing instruction were significantly more content to view highly negative pictures than individuals in control groups. Considering the political repercussions of selective exposure to and interaction with the environment (see Section *Interdependency: Why Our Inner and Outer Lives Are Not Separate*), this finding is of notable interest to scholars seeking for ways to keep motivated reasoning at bay.

In parallel, research suggests that dispositional mindfulness is positively associated with *positive reappraisal*, an adaptive process in which stressful events are reinterpreted as meaningful and beneficial (Hanley and Garland, 2014; Hanley et al., 2014). Experimental studies provide evidence that mindfulness training engenders similar effects: after mindfulness-based interventions, participants report an increase in positive reappraisal (Garland et al., 2011)[7]. To sum up, research in psychology suggests that mindfulness is associated with improvements across the whole spectrum of emotion regulation strategies: while maladaptive coping abilities such as suppression and avoidance are dampened, antecedent-focused strategies, such as reappraisal and exposure, are enhanced. Given the positive effect of re-appraisal on intergroup reconciliation and political tolerance (Halperin et al., 2011; Halperin et al., 2014), these mindfulness-induced changes in emotion regulation strategies constitute another potential linkage between political science and mindfulness research.

Closely tied to the ability to regulate emotions is the second dimension of self-regulation: *attention regulation* (AR). Focusing attention on a single object, for instance the breath, is a core feature of–and prerequisite for–mindfulness practice. Sustaining attention on the chosen object and returning it to the object whenever distracted can be regarded as a training in attentional performance as a number of studies document: regular meditation practice (Jha et al., 2007) as well as short-term mindfulness-based interventions (Tang et al., 2007) increase executive attention.

In concert with ER, AR enables individuals to perceive situations from a neutral perspective, attending to both pleasant and unpleasant shades of experiences alike. Literature on the interdependency of internal dispositions and processes, external factors, and attitudes (see Section *Interdependency: Why Our Inner and Outer Lives Are Not Separate*) suggests that an enhanced self-regulation ability might prompt political consequences. Directly, as reappraisal strategies are shown to be positively related to political tolerance and support of reconciliation (e.g., Halperin et al., 2011). And indirectly, as enhanced emotion and attention regulation render cognitive dissonance less problematic, increasing exposure to

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[7]Note that there is an ongoing discussion as to whether mindfulness indeed encourages re-appraisal of thoughts and emotions or rather non-appraisal. Neuroscience suggests that the effect of mindfulness on cognitive control could be time-dependent: while early-stage meditators might require more active regulation (measured as increased blood flow in various prefrontal regions), expert meditators might use different strategies drawing on an automated accepting stance of experiences (for an overview, see Hölzel et al., 2011, 544ff.).

contradictory information–and thus cracking open echo chambers.

Closely linked to these changes in self-regulatory processes, mindfulness seems to affect *magnitude* and *valence* of emotions. First, mindfulness is shown to reduce *emotional reactivity* in response to both positive and negative stimuli (Taylor et al., 2011). Related research suggests that mindfulness practice helps individuals to disengage from troubling emotions, opening up the attentional space for other aspects of experience (e.g., Arch and Craske, 2006; Ortner et al., 2007). Second, mindfulness is associated with altered *valence* of emotions, manifesting in a decrease in negative mood states (Arch and Craske, 2006; Jha et al., 2010) and an increase in positive affect (Jain et al., 2007)[8].

In addition to shifts in emotional reactivity and valence, mindfulness seems to affect the prevalence of basic emotions. Mindfulness-based interventions reduce disturbing emotions that impair the ability to remain fully present, such as anger (Wright et al., 2009; Momeni et al., 2016), anxiety (Goldin and Gross, 2014), perceived threat (Niemiec et al., 2010), fear (Greeson and Brantley, 2009), distress (Grossman et al., 2004; Chiesa and Serretti, 2009; Momeni et al., 2016), and disgust (Sato and Sugiura, 2014).

Research at the nexus of emotions and attitudes suggests that changes in these emotional states affect the way individuals expose themselves to and interact with the political world (see Section *Emotions and Emotional Valence*). Attenuating the disruptive potential of high-motivation emotions (e.g., disgust, fear, and anger) might thus lead to a shift in substantive attitudes on the one hand, and to altered patterns of exposure to the environment on the other.

Mindfulness and the Perspective on the Self

Intertwined with changes in the self-regulation processes discussed above, is a change in the *perspective on the self* (Hölzel et al., 2011). Deliberately paying attention to thoughts, emotions, and sensations, practitioners come to understand their transient nature: all contents of consciousness are in constant change. Taking this "observer perspective" (Kerr et al., 2011), also referred to as meta-awareness, fosters a detachment from a static sense of self. Instead, one becomes able to perceive the self as an impermanent product of ongoing mental processes: "th[e] seemingly solid, concrete, independent, self-instituting I [...] actually does not exist at all" (Gyatso, 1984, 70). This alteration in first-person experience enables one to decipher emotional states in their fluidity and to integrate them in the momentary experience of events.

This shift in the perspective on the self is linked to *self-compassion*. Taking the observer perspective and becoming aware of interpretation and judgment, enables a transformation from self-criticism into self-understanding. Put differently, for self-compassion to take roots, *mindfulness* is necessary (Neff, 2003)[9]. The relationship between mindfulness and self-compassion is, however, bidirectional: while mindfulness-based interventions are shown to enhance self-compassion (Birnie et al., 2010), self-kindness and feeling of interconnectedness further enhance mindfulness (Shapiro et al., 2007). Relating to one's own suffering with kindness and understanding, in turn, allows one to generate kindness and understanding for all who are suffering. Depersonalizing experiences of inadequacy and embedding them in the human condition thus add to the emotion regulation ability of mindfulness (Neff, 2003) and generate feelings of *empathy and compassion*[10].

Resonating with the emotional states of others (i.e., understanding and sharing feelings) can inform two types of responses. For one, it can lead to empathic distress. While in empathy, one feels with someone but does not confuse oneself with the other, this self-other distinction can get lost and results in emotion contagion that, in turn, leads to *empathic distress*: your emotion is my emotion, your pain is my pain. This conjures up negative feelings (e.g., stress) and ultimately leads to withdrawal and non-social behavior (Singer and Klimecki, 2014) potentially explaining the increased polarization of highly empathetic individuals in the political sphere (Simas et al., 2020). The alternative empathic reaction is *compassion*: here, the self-other distinction remains intact. Your pain is your pain–but I care for you and aim to alleviate your pain. Compassion is thus "feeling *for* and not feeling *with* the other" (Singer and Klimecki, 2014, 875). It generates positives feelings (e.g., love) and encourages approach and pro-social behavior. Preliminary evidence suggests that mindfulness interventions (for an overview, see Birnie et al., 2010) as well as loving-kindness meditations (Hofmann et al., 2011) increase both dimensions of empathy as well as compassion while reducing empathic distress.

All Together Now: Integrating Mechanisms

The three mechanisms of mindfulness outlined above–emotion regulation, attention regulation, and changes in the perspective on the self–are highly interrelated. Literature suggests that

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[8]At this point, the question arises whether and to what degree emotions are separable from emotion regulation. Debate on this subject is still ongoing: while conceptualized as separate processes in Gross's (1998) foundational ER model, distinctions are nowadays assumed to be primarily heuristic. Proponents of a one factor model assert that "emotion and emotion regulation are conjoined [...] as one observable process" (Campos et al., 2004, 379); as emotions are generated while being regulated, any separation is artificial (for an overview, see Chambers et al. 2009). Building on this perspective, effects of mindfulness on a wide array of emotions warrant attention.

[9]Note that self-compassion is fundamentally different from self-esteem as it does not depend on performance evaluations of self and others, or on congruence with ideal standards (Neff, 2003).

[10]At this point a delineation of two concepts requires attention: empathy and compassion are often used interchangeably (e.g., Blinder and Meredith, 2018), yet are not identical. Empathy can be broadly defined as the ability to understand and share feelings of others (Davis, 1983). This involves a *cognitive component*, the capacity to accurately discern the emotional state of someone else (I *understand* what you feel.). The *affective* (or emotional) *component* adds another layer: it makes it possible to share others' feelings (I *feel* what you feel). Though conceptually different, these two dimensions of empathy are closely intertwined and usually operate in conjunction (Cox et al., 2012).

separating them might be artificial, but is of heuristic value (for a discussion, see Hölzel et al., 2011). The components of mindfulness mutually reinforce each other, forming an upward spiral (Hanley and Garland, 2014): attention regulation acts as a prerequisite, enabling practitioners to observe the emergence of thoughts and emotions, and facilitates the use of re-appraisal. The ability to successfully regulate emotions, in turn, keeps open the attentional space, allowing for diverse information input and processing. Holding emotions in awareness without identifying with them further leads to a change in perspective on the self–which again facilitates reappraisal and attention. Different types of mindfulness practice, such as focused attention, open awareness, and loving-kindness meditation might differently affect these components of mindfulness. Research disentangling them is, however, in its infancy.

Irrespective of conceptual intricacies, mindfulness as an overarching construct informs a decrease in disturbing emotions, such as anger, fear, anxiety, perceived threat, distress, or disgust, as well as increases in positive emotions, empathy and compassion toward oneself as well as toward others. All these variables are also figuring prominently in attitudinal research. So, what does scientific research on mindfulness imply for political science? In the ensuing sections, I outline existing research on the mindfulness-attitude nexus, uncover gaps in research (see Section *Emotion Regulation*), and conclude by discussing the potential of mindfulness in the political sphere sketching out avenues for future research (see Section *Empathy*).

CONNECTING WORLDS: BRIDGES BETWEEN MINDFULNESS AND POLITICAL ATTITUDES

Though mindfulness affects a variety of emotional and cognitive processes that are linked to political attitudes, political science has remained agnostic of its explanatory potential. Considerations of mindfulness in the context of politics remain superficial, are mostly located at the theoretical level, reflecting on the possibility that mindfulness practice produces a progressive political orientation. Expectations in this regard diverge (Moore, 2016; Rowe, 2016; Chari, 2016; Kabat-Zinn, 2012; Mathiowetz, 2016) and empirical research has not delivered yet.

Extant Research at the Mindfulness-Politics Nexus

One notable exception is research assessing the effect of a short mindfulness intervention on affective political polarization in the US (Simonsson et al., 2021). Results are ambiguous, however: while a brief befriending meditation–an essential ingredient in mindfulness courses–reduces affective polarization between Democrats and Republicans by increasing positive feelings for the outgroup, no similar effect was detected for a mindfulness meditation intervention. Findings of a representative online survey testing for the prevalence of mindfulness awareness and practice in Great Britain also point to a political dimension of mindfulness: citizens who voted Remain in the Brexit vote–a

choice closely tied to affiliation with the center-left Labour party–were significantly more aware of the concept of mindfulness (Simonsson et al., 2020).

While evidence for a linkage between mindfulness and political attitudes is a lacuna in political science, research in social psychology does provide indicative evidence: for one, studies reveal that short mindfulness inductions significantly *reduce implicit bias and prejudice*. After a 10 min mindfulness audio intervention, Lueke and Gibson (2015) see implicit out-group bias against Blacks and the elderly declining significantly. The same intervention was also predictive of discriminatory behavior: participants in the mindfulness condition exhibited significantly less discrimination in the trust game than control group participants (Lueke and Gibson, 2016). Mindfulness interventions seem to be applicable across different specifications of out-groups (Tincher et al., 2016) and outperform educational approaches when it comes to bias reduction (Lillis and Hayes, 2007). The relationship between trait mindfulness and prejudice is, however, less clear (Adelheid and De France, 2018).

For another, research suggests that mindfulness is positively related to *pro-social behavior*. Condon et al. (2013) show that participants of an 8 weeks meditation course (either compassion or mindfulness) were significantly more likely to offer a seat to a suffering person on crutches than individuals in the control condition. Further correlational and experimental studies corroborate this finding: both dispositional (Cameron and Fredrickson, 2015) and induced mindfulness (Berry et al., 2018) are associated with real-world helping behavior. Presumably, the "power of meditation increase[s] compassionate responding to suffering, even in the face of social pressures to avoid so doing" (Condon et al., 2013, 2,126).

Closely related to prejudice and pro-sociality, trait mindfulness (as well as empathy; for an overview, see Waytz et al., 2016) is found to be negatively related to *social dominance orientation* (SDO; Panno et al., 2018). SDO can be considered a general attitude toward intergroup relations, reflecting whether one prefers hierarchical to equal relations and is measured by levels of agreement with statements such as "Superior groups should dominate inferior groups", or "In setting priorities, we must consider all groups (reverse)" (Pratto et al., 2013). SDO is closely linked to the political dimension, negatively correlating with overall measures of political liberalism as well as liberal attitudes (Pratto et al., 1994; Ho et al., 2012).

On a different note, research in social psychology and educational studies provides correlational evidence for a relationship between mindfulness and sustainability. Dispositional mindfulness is shown to be positively related to belief in climate change (Panno et al., 2018) and *self-reported pro-environmental behavior* (Amel et al., 2009; Brown et al., 2009; Barbaro and Pickett, 2016; Panno et al., 2018). Pointing toward a close connection between high levels of attention to and awareness of our context and environmental concern and sustainable behavior, Wamsler (2018, 1130) suggests that "mindfulness has the potential to contribute to facilitating climate adaption at all scales, from the individual to the institutional and societal level".

Yet, studies testing for a causal effect of mindfulness on pro-environmentalism drawing on experimental designs (Stanszus et al., 2017; Böhme et al., 2018; Geiger et al., 2019) are limited to the realm of sustainable consumption, thus capturing only a fragment of the pro-environmentalism spectrum. Furthermore, due to selection biases and small sample sizes (see Thiermann and Sheate, 2020), available results are hardly generalizable. Observed changes in subjective well-being and materialistic value orientations, known predictors of climate change attitudes and actions, point into the expected direction, though.

Avenues for Future Research

Considering the interrelatedness between mindfulness and close correlates of political attitudes (such as social dominance orientation, pro-sociality, or prejudice) on the one hand, and suggestive evidence on the relationship between mindfulness and climate change attitudes and political polarization on the other hand, the mindfulness-politics nexus offers plenty of territory for political scientists to charter. Tying together the evidence on effects of mindfulness and predictors of political attitudes, five pathways seem especially promising to explore: first, future research might want to illuminate the effect of mindfulness on the relationship between emotions and political attitudes. Extant studies in social and political psychology suggest threat-induced emotions, such as anger, fear, anxiety, and disgust, are related to policy preferences and political attitudes (see Section *Why We Think What We Think: Exploring the Antecedents of Political Attitudes*). Future research could explore whether and how dispositional mindfulness is related to inter-individual differences in these sets of emotions and related attitudes. Given the dampening effect of mindfulness on the prevalence and intensity of disturbing emotions (e.g., Goldin and Gross, 2014; Momeni et al., 2016), both trait and induced mindfulness might be systematically related to the evaluations of political issues via emotions. On a similar note, future research might want to extend the limited view on empathy in the political field by shedding light on the relationship between empathy, compassion, mindfulness, and political attitudes.

Second, and closely related, the relationship between mindfulness, emotion regulation strategies, and political attitudes warrants further attention. Research suggests that antecedent-focused strategies of emotion regulation, such as positive re-appraisal, are positively related to political liberalism (Lee et al., 2013), pro-sociality (Halperin et al., 2013), and political tolerance across group boundaries (Halperin et al., 2014). With induced mindfulness engendering increases in positive reappraisal (Garland et al., 2011), scholars interested in conflict resolution and political polarization are encouraged to follow the pathway set out by Alkoby et al. (2017) and Simonsson et al. (2021) to further explore the potential of mindfulness for inter-group reconciliation.

Third, given the findings that emotion regulation strategies correlate with liberalism on the one hand and mindfulness on the other, the question arises of whether mindfulness (training) might move individuals to the left side of the ideological spectrum. While this question has not been answered empirically yet, a different conjecture seems

equally plausible. Mindfulness might engender a humanistic worldview that is antagonistic to authoritarianism stemming from both ends of the ideological continuum. Research on increases in political tolerance and support for reconciliatory policies (Halperin et al., 2014; Hurtado-Parrado et al., 2019) after mindfulness-based interventions points into this direction. Future research might want to explore these hypotheses empirically.

Fourth, the relationship between mindfulness and environmental stimuli warrants attention. Research suggests that mindfulness-induced improvements in emotion and attention regulation facilitate a neutral perception of sensations (Hölzel et al., 2011). Taking a non-judgmental stance opens up a perceptive space that, for one, renders cognitive dissonance less problematic. Consequently, individuals high in trait or induced mindfulness are less likely to avoid confrontation with negative or contradictory information (Arch and Craske, 2006). Transferring this mechanism to the political sphere, it could be hypothesized that mindfulness increases the willingness to attend to adverse political opinions, reducing selective exposure to and biased processing of information. Given the omnipresence of self-referential echo chambers and its problematic implications, finding ways to crack them open might be key in overcoming societal conflicts. For another, a neutral stance toward information combined with increased attention regulation might reduce individual's susceptibility to misinformation. As Teper et al. (2013) show, mindfulness increases the sensitivity to affective cues, enabling individuals to unmask emotional targeting. Increased emotional literacy, in turn, seems to improve resilience to misinformation and stereotyping (Sivek, 2018). Future research might want to provide evidence for this potential linkage between mindfulness and information-processing.

Fifth, future research could explore the potential of mindfulness to address intertwined global challenges, such as climate change and political polarization. The positive effects of mindfulness on measures of pro-environmentalism (e.g., Barbaro and Pickett, 2016) and intergroup reconciliation (e.g., Halperin et al., 2014) substantiate the conjecture that mindfulness could pay a double dividend. Fostering belief in and action against climate change while in parallel reducing the ideological polarization surrounding this issue (e.g., Dunlap et al., 2016), mindfulness might contribute to overcoming societal challenges. To put this conjecture on solid ground, future research would want to explore the size, durability, and generalizability of these effects.

CONCLUSION

During the last decades, research into the antecedents of political attitudes travelled a long way. From external explanations highlighting the formative power of socialization over considerations of static internal characteristics, such as personality traits, to dynamic psychological processes like emotion regulation, research unveiled the complexities of attitude formation and change. And still, the picture that we are confronted

with, remains rough-grained. We only begin to understand how emotions shape attitudes, why emotion regulation affects intergroup relations, or whether empathy facilitates pro-sociality. We know even less about tracks for intervention, about ways to harness the power of these deep-seated psychological mechanisms to overcome the challenges of our times.

This literature review outlined how explorations into the political consequences of mindfulness can contribute to closing these gaps in research. By delineating the common ground between studies assessing the antecedents of political attitudes and mindfulness research, a suggestive pattern emerged: the ability of paying attention to the present moment, on purpose, and without judgment is at least correlated with–if not affecting–a wide array of (the underpinnings of) political attitudes. The cultivation of mindfulness leads to significant gains in social competence (Flook et al., 2015), perspective-taking, and pro-social behavior (Leiberg et al., 2011; Condon et al., 2013; Weng et al., 2013; Cameron and Fredrickson, 2015). Prejudice, be it age- or race-related, fades as mindfulness increases (Lueke and Gibson, 2015; Lueke and Gibson, 2016), conciliatory policies gain more support (Alkoby et al., 2017),

and pro-environmental attitudes and pro-environmental behaviors intensify (Amel et al., 2009; Wamsler, 2018). In short, extant research suggests that mindfulness has political consequences as it reduces outgroup biases, increases pro-social behavior, heightens environmental awareness, and amplifies pro-environmentalism. And yet, with political science only beginning to tap the explanatory potential of psychological processes, mindfulness has barely received attention yet.

Mindfulness is, however, worthwhile studying not only from a scholarly perspective. With its supposed potential to foster pro-sociality across group boundaries and to enhance pro-environmentalism, mindfulness might contribute to overcoming the intertwined challenge of climate change and political polarization by inducing change from the inside out.

AUTHOR CONTRIBUTIONS

The author confirms being the sole contributor of this work and has approved it for publication.

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