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DOI

[10.31234/osf.io/e4w7x_v1](https://doi.org/10.31234/osf.io/e4w7x_v1)

Publication date

2025

Document Version

Submitted manuscript

License

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Citation for published version (APA):

Peterson, D., Schumacher, G., Hopp, F. R., & Bakker, B. N. (2025). *Political mental health is distinct from mental health and has unique political correlates*. PsyArXiv. https://doi.org/10.31234/osf.io/e4w7x_v1

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Political mental health is distinct from mental health and has unique political correlates

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September 24, 2025

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Abstract

Academics and pundits alike suggest politics harms our health. In the literature on mental health and politics -work that spans different disorders and political outcomes-there has been a turn to domain-specific measures of 'political health'. However, when studying the complex relationship between mental health and politics, it is not yet clear if we need a disorder specific or general approach and to that end, if there is a need for domain-specificity (i.e., what it might contribute beyond traditional mental health measurements). To investigate this, we test and compare the construct and predictive validity of domain-specific political mental health (PMH) and general mental health (MH) in a study conducted in the Dutch population. Through our tests of construct validity, we find PMH is an independent construct to MH. Our tests of predictive validity demonstrate that while both PMH and MH have a range of political correlates, from political participation to external political efficacy, it is PMH that has stronger and broader political associations – to affective polarization, ideological extremism and news aversion, among others. In the discussion we outline a research agenda for moving forward the study of mental health and politics in light of our findings: our results imply that domain-specificity is needed to properly identify the extent to which mental health is connected to engagement with politics and who may be the most affected and importantly, that PMH and MH have more far reaching political consequences than previously assumed.

Introduction

Politics is argued to be a source of chronic stress for individuals across the political spectrum (Mental Health Foundation, 2025; Tsakiris, 2020). People report a range of symptoms, from anxiety and depression to headaches and hypertension (Anxiety and Depression Association of America (ADAA), 2024; Nayak et al., 2021). The American Psychological Association even claims that “Politics seep into daily life, negatively affecting mental health” (American Psychological Association, 2023). An emerging literature investigates this relationship but uses different mental-health disorders (i.e., anxiety or depression) (Bernardi, 2021; Makri, 2024; Ortlund et al., 2025) while others use domain-specific measurements (i.e., political health (Smith et al., 2019; Weinschenk & Smith, 2024)). Also they assess the relationship between health and politics along a range of different political outcomes, from voting behavior to news aversion. As a consequence, it is hard to draw robust conclusions about the relationship between mental health and politics and leaves questions unanswered. Do we need a disorder-specific approach or a general one? Is there a need for domain-specificity when studying mental health and politics? In this paper, we broaden and deepen the literature on mental health and politics by establishing the construct validity of domain-specific political mental health and test and compare its predictive validity with mental health across a range of relevant political correlates.

The term “mental health” refers to a state of being absent from mental disorders (Galderisi et al., 2015). The most common mental disorders are depression and anxiety (Santomauro et al., 2021). One line of research considers the political correlates of mental health. Higher levels of *depression* for example, have been associated with negative assessments of democracy (Landwehr & Ojeda, 2021), decreased political participation (Landwehr & Ojeda, 2021; Ojeda, 2015), and decreased political efficacy (Bernardi, Mattila, et al., 2023; Landwehr & Ojeda, 2021). At the same time, self-reported *anxiety* has been linked to increases in political activism (Albright & Hurd, 2023) and exposure to political news (de Bruin et al., 2021; Toff & Nielsen, 2022). Some work has looked at the impact of specific political developments on mental health, such as elections (Krupenkin et al., 2019; Mukhopadhyay, 2022; Neupert et al., 2021; Relihan et al., 2025; Roche & Jacobson, 2019) and the COVID-19 pandemic (Bernardi & Gotlib, 2022). Others, consider the impact of macro-level structural determinants and mental health (McAllister et al., 2018; Simpson et al., 2021), suggesting the increase or decrease of welfare state policies have important ramifications for collective well-being.

In order to understand the relationship between mental health and politics more concretely, there has also been an introduction of domain-specific health, focusing on how politics influences health. “Political health”, for example, was designed to measure the “health-related impacts of political engagement” (Smith, 2022; Smith et al., 2019). In a representative survey of the US population conducted in the year 2020, Smith et al., 2019 find a striking amount (around 50 to 85 million people) of Americans perceive politics as a direct harm to their health. While the literature up until now has looked at mental health and politics as two distinct but sometimes related domains, Smith et al., 2019’s findings point to the reality that politics may be responsible for an emerging category of mental health problems, one that traditional mental health measures may neglect to capture. However, it was not evaluated whether political health is in fact *distinct* from general mental health disorders, leaving open the question whether or not political health associations are proxies for general mental health.

Relatedly, the concept “political anxiety” captures anxiety specifically about politics. In their study, Weinschenk and Smith (2024) find preliminary evidence for a weak ($r=.3$) association between political anxiety and generalized anxiety, suggesting they are distinct concepts. However, in their study, political anxiety is not tested in comparison to other mental health disorders studied in the health-politics literature (mainly, depression and general health), leaving uncertain if it is indeed independent from other domain-specific disorders. Despite this turn toward domain-specificity, it remains unclear if it is needed when studying mental health and politics (i.e., what it contributes beyond traditional mental health measurements) and, if we need a disorder specific approach or a general one.

In this paper, we deepen and broaden our knowledge of the association between mental health and politics by validating and comparing domain-specific political mental health with general mental health. We deepen our understanding by testing the construct validity of domain-specific political mental health in four ways. First, we explore the extent to which political mental health (PMH) is disorder-specific or general, i.e. whether it is a unidimensional or multidimensional construct (Smith et al., 2019; Weinschenk & Smith, 2024). Second, we test the dimensionality of our PMH and MH scales when combined, to determine if PMH is indeed distinct from MH. Third, we explore the test-retest reliability of PMH (and MH) across the survey waves. Lastly, we test and compare the discriminant validity of PMH to our validated MH scale and to common psychological correlates of MH.

We broaden what we know about mental health and politics by testing and comparing the predictive validity of our PMH and MH scales. First, as pre-registered, we test and compare the predictive validity

of PMH and MH across a wide range of political correlates - some that have been previously studied (such as interest in politics (Weinschenk & Smith, 2024)) and others, that -to our knowledge- are tested here for the first time (anti-democratic attitudes and ideological extremism for example). Next, we run two sets of exploratory tests: moderation analyses that test for interaction effects between PMH and MH in predicting political outcomes and a variance decomposition analysis to determine the proportion of variance explained by PMH and MH independently, and shared, across various political correlates.

We report the results of a three-wave study among Dutch adults collected in the period of December 2023 to December 2024. Through a series of pre-registered tests of construct and predictive validity we establish that PMH and MH are two independent, empirical constructs that exhibit comparable predictive validity but importantly, show different patterns of association. PMH is more closely tied to political attitudes and behaviors and explains unique variance above and beyond MH. MH on the other hand, is more predictive of internal psychological states, explaining unique variance above and beyond PMH. Finally, the results of the moderation analyses suggest that PMH and MH, while distinct, have the potential to influence outcomes synergistically, such that the effect of one can in some cases, depend on the level of the other.

By addressing whether PMH and MH are similar or distinct and through considering their associations with political phenomenon, we bring together two lines in the literature: one on mental health and politics and one on domain-specific political health and politics (Bernardi et al., 2024; Smith, 2022). Our results have important implications for the study of mental health and politics moving forward. Firstly, as PMH and MH are distinct concepts and PMH is more tied to political outcomes, domain-specificity may be needed to properly identify the extent to which mental health is connected to engagement with politics and who may be the most affected. Secondly, we find associations between poor PMH and MH and anti-democratic attitudes, conspiracy mentality and affective polarization (among others) suggesting PMH and MH have more far-reaching political consequences than previously assumed. Thirdly, the moderation effects of PMH and MH provide tentative evidence to suggest while independent constructs, they are sometimes related. As previous work has demonstrated (Farber, 2018), the topic of politics is increasingly common in clinical practice, our results deserve attention from researchers, but also, mental health practitioners.

In this paper we are focused on developing the concept of political mental health. We discuss the literature on mental health and politics throughout our sections on predictive validity and the conclusion and discussion section see (Bernardi, Gotlib, & Bernardi, 2023; Nayak et al., 2021; Smith, 2022, for the most up-to-date synthesis.). To save space, we do not repeat these literature overviews here.

Methods

Research Design

To analyze the construct and predictive validity of Political Mental Health (PMH) and Mental Health (MH), we fielded extended existing batteries of the two concepts in three surveys. There are four main steps of our research design, pre-registered, and outlined in Figure 1. Pre-analysis plan 1 (PAP 1: <https://osf.io/djgrz/>) outlines the split-half approach and data collection of the first survey. In Step 1, using a split-half approach (Anderson & Magruder, 2017), we explore the psychometric properties and dimensionality of the PMH and MH items with the first half of the first survey (Wave 1) - what we call the “Exploratory” phase. In Step 2, we confirm our expectations with the second half of the first survey (Wave 1) - what we call the “Confirmatory” phase. In Step 3, we explore the predictive validity of PMH and MH (Wave 1 - Exploratory) across a range of political correlates. In Step 4 we confirm our expectations (Wave 3 - Confirmatory). We also conducted a series of exploratory analyses that were not pre-registered -we indicate which analyses were pre-registered and which were not in the results section.

Due to the similar item wording between the PMH and MH items, for each wave, half of the respondents received the PMH items and the other half received the MH items. The order of the PMH and MH batteries was randomized per wave. See Appendix, Table 3 for an overview of what variables were collected per wave, and which analysis they were used in.

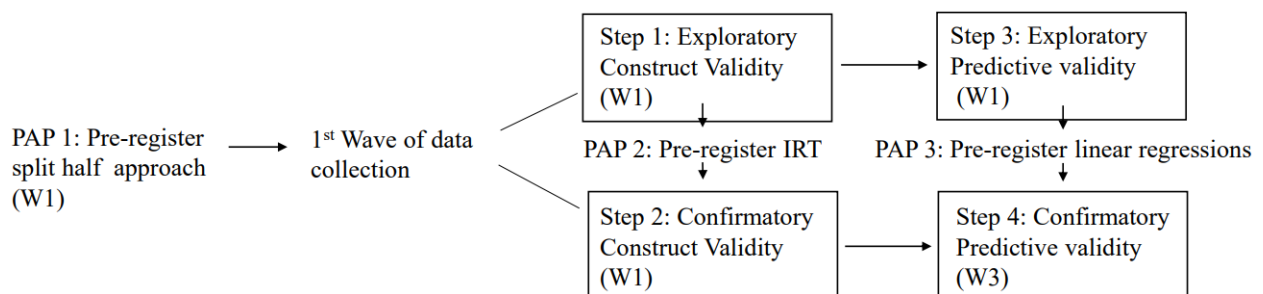


Figure 1: Study Design. Note: This figure outlines our pre-registered study design, with an exploratory and confirmatory phase for both construct and predictive validity. We did not collect any political correlates during Wave 2, therefore, Wave 2 was used for tests of construct validity we pre-registered later on in the study, see PAP 3: <https://osf.io/makdf>. See here for access to all of the pre-analysis plans: <https://osf.io/bws5n/>.

Openness, Transparency and Ethics

This study received ethical approval from the ethics board of our university [number redacted for peer review]. Participants signed informed consent upon the start of each survey. The different steps of the project were pre-registered on the Open Science Framework (OSF) (<https://osf.io/bws5n/>). After each pre-registration, we got access to the next batch of data. The sample sizes per wave were decided by the team on the omnibus study. For the predictive validity analyses (Step 3 & Step 4 - see Figure 1), we ran priori power analyses to determine the range of effects we can reliably detect with the expected sample size per wave (Lakens, 2022). The results we present here are sufficiently powered (power=.8, alpha[one-sided]=.05) to detect population-based effects of $b=.13$ or larger for Step 3 -based on the split-half sample size- and $b=.11$ or larger for Step 4. These effects sizes are small but substantively meaningful (Lakens, 2022).

Pre-analysis Plan Deviations

In Step 4, our confirmatory tests of predictive validity (PAP 3:<https://osf.io/makdf/>), we updated our modeling strategy. We pre-registered to test our hypotheses with PMH and MH as outcome variables, and the political correlates as predictors (the reader can derive these results from the replication files). However, given the randomization of political correlates during data collection, our models required mean imputation to reach an adequate sample size. To account for this, we opted to update our modeling strategy, with each political correlate as the outcome variable. The hypotheses we test in the paper have not changed, and are those detailed in PAP 3. See here for details and for other, minor deviations:<https://osf.io/fx59s/>.

Sample

We report the results from an ongoing panel study in the Netherlands. Participants were recruited by Fly-catcher among the Dutch population with quotas for education, gender, province, and age (the full survey can be found on the OSF:<https://osf.io/djgrz/>). We utilize three waves: Wave 1, collected in December 2023 ($N = 2,060$), Wave 2, collected in April 2024 ($N = 2,149$) and Wave 3, collected in December 2024 ($N = 1,961$) - new participants were added during Wave 2 and Wave 3. Some participants took part in all survey waves, some only participated in one wave. See Appendix 1, Table 4 for the attrition rates across waves. The retention rates suggest that roughly 80% of participants remained from one wave to the next, indicating moderate attrition over the course of the study. Participants received 3 euros for their participation

per completed survey.

Measures of Political Mental Health and Mental Health

Our starting point was Smith et al., 2019's short-form (10-item) political health scale. From there, we added a politically adapted version of the Patient Health Questionnaire (PHQ-4; (Kroenke et al., 2009)), a validated short-form measure of anxiety and depression. We adapted the items to measure political anxiety and political depression. For example, "Feeling down, hopeless or depressed" was changed to "Feeling down, hopeless or depressed *about politics*". We also included a self-constructed item on political anger "Politics makes me very angry". We wanted to compare PMH to very similarly worded general mental health items. To do this, we used the PHQ-4 to measure anxiety and depression and used validated general mental health items inspired by Smith et al., 2019. See Table1 for the PMH and Table2 for the MH items.

For any variable in this study that was comprised of more than one item (PMH, MH for example) the mean of the items per respondent was taken. To account for missing values when taking the mean of variables with multiple items, we used the `rowMeans()` command in R (version 4.3.2), which excludes items with missing values. We used listwise deletion to handle missing values otherwise. PMH and MH were z-standardized per wave.

Table 1: Political Mental Health

Political Mental Health	Source
1. Politics has caused me to be stressed.	Smith et al., 2019
2. Politics has caused me to be fatigued.	Smith et al., 2019
3. Exposure to media outlets promoting views contrary to mine can drive me crazy.	Smith et al., 2019
4. I have lost my temper as a result of politics.	Smith et al., 2019
5. Politics has led me to hate some people.	Smith et al., 2019
6. Politics has caused me to think seriously about moving.	Smith et al., 2019
7. Not being able to stop or control worrying about politics.	Kroenke et al., 2009
8. Feeling down, depressed or hopeless about politics.	Kroenke et al., 2009
9. I have become depressed when a preferred candidate lost.	Smith et al., 2019
10. I spend more time thinking about politics than I would like.	Smith et al., 2019
11. I care too much about who wins and loses in politics.	Smith et al., 2019
12. Differences in political views have damaged a friendship I valued.	Smith et al., 2019
13. Politics makes me very angry.	Self-constructed
14. Feeling nervous, anxious or on edge about politics.	Kroenke et al., 2009
15. Little interest or pleasure in following politics	Kroenke et al., 2009

Note: All 15 items were included in Step 1 of the project. The items in bold did not load onto any dimension during Step 1, so they were excluded from further analysis and are excluded from Figure 2. The items shaded in grey are the items that make up our short-form (8-item) batteries, used in all analyses but those outlined in Step 1 and Step 2. The “source” column identifies where each item comes from. These items are in the same order as in Figure 2.

Table 2: Mental Health

Mental Health	Source
1. Felt nervous and stressed?	Jackson, 2007
2. Felt constantly under strain?	Jackson, 2007
3. Felt difficulties were piling up so high that you could not overcome them?	Reis et al., 2010
4. My emotions are overwhelming or out of control?	Dan-Glauser and Scherer, 2012
5. Feeling unsatisfied with your social contacts?	Mulder and Das, n.d.
6. Felt that you were unable to control the important things in your life?	Reis et al., 2010
7. Lost much sleep over worry?	Jackson, 2007
8. Felt down or depressed?	Jackson, 2007
9. Been able to concentrate on whatever you’re doing?	Jackson, 2007
10. Felt that things were going your way?	Jackson, 2007
11. Felt confident in your ability to handle your personal problems?	Reis et al., 2010
12. Feeling down, depressed or hopeless.	Kroenke et al., 2009
13. Little interest or pleasure in doing things?	Kroenke et al., 2009
14. Feeling nervous, anxious or on edge	Kroenke et al., 2009
15. Not being able to stop or control worrying.	Kroenke et al., 2009

Note: All 15 items were included in Step 1 of the project. The items in bold did not load onto any dimension during Step 1, so they were excluded from further analysis and are excluded from Figure 2. The items shaded in grey are the items that make up our short-form (8-item) batteries, used in all analyses but those outlined in Step 1 and Step 2. The “source” column identifies where each item comes from. These items are in the same order as in Figure 2.

Political correlates

We measured a range of political correlates tapping into engagement - see Appendix, Table 3 for Wave designation per variable. Note that in Wave 1, due to the large number of survey items included, we randomized the political variables during data collection so that each participant received a subset of them. All scales with more than 2 items have acceptable internal consistency: see Appendix, Table 5.

Political participation was measured with five items, on a scale of 1-7 (1 strongly disagree, 7 strongly agree). Participants were asked the question “To what extent would you be prepared to take the following actions on a political issue that is close to your heart?”, an example being “Become a member of a political party or action group.” *News aversion* was measured differently at Wave 1 and Wave 3, due to finding a more robust conceptualization after the first wave of data collection. At Wave 1, we measured news aversion with three items taken from de Bruin et al., 2021’s news avoidance scale, that we adapted to refer to news aversion in general and not news specific to the COVID-19 pandemic. At Wave 3, news aversion was measured with one item, from Toff and Kalogeropoulos, 2020: “I actively try to avoid the news these days” with response categories: never, sometimes and often. We measured *political interest* with the standard question “Some people are very interested in politics, others much less so. Where do you place yourself on a scale from not at all to very interested in politics?” on a scale of 1-4 (0 not at all interested, 4 extremely interested) (Prior, 2019). *External political efficacy* was measured with 6 items on a scale of 1-7 (1 strongly disagree, 7 strongly agree) asking respondents “To what extent do you agree or disagree with the following statements?”, an example being “I am well able to play an active role in politics.” *Confidence in political knowledge* was measured with 4 items on a scale of 1-7 (1 strongly disagree, 7 strongly agree), from (Rebasso et al., 2023), asking respondents “To what extent do you agree or disagree with the following statements?”, an example being, “In my friend group, I am an expert in the field of politics”.

Right-wing ideology was measured with the question “In politics, people often talk about ”left” and ”right.” What is your position? Express your position by using a scale from 0 to 10, where 0 means ”extreme left” and 10 means ”extreme right.” Which number best describes your position?”. To measure *ideological extremism*, we folded the right-wing ideology scale at the midpoint (5) and recoded the range from 0-4 to measure ideological extremity at both the left and right side of the political spectrum.

Conspiracy mentality was measured with 4-items from the Conspiracy Mentality Questionnaire (Bruder et al., 2013), measured on a scale of 0-100 (0 strongly disagree, 100 strongly agree), an example being “I

think that there are secret organizations that greatly influence political decisions.”. We use Wagner, 2021’s score to conceptualize *affective polarization* as the spread of like and dislike across 5 political parties (The People’s Party for Freedom and Democracy (VVD), Party for Freedom (PVV), Green Left (GL), DENK, and the New Social Contract (NSC)). Participants assess their feelings about these parties on a scale from 0 to 10, where 0 means you have very negative feelings and 10 means you have very positive feelings. We then follow Kasper et al. (2024) to calculate an affective polarization score. For *anti-democratic attitudes*, we utilized Claassen et al., 2024’s support for democracy scale, consisting of 17 items on a scale of 1-5 (1 strongly disagree, 5 strongly agree), which were reverse coded so that a higher score indicated anti-democratic attitudes. Participants were asked “Do you agree or disagree with the following principles regarding how a political system should be organized and governed?”, an example being “People should be free to criticize the government, even in times of severe crisis.”

We also collected psychological variables associated with mental health: loneliness, neuroticism and self-esteem. Loneliness was measured using the validated six-item scale (De Jong-Gierveld & van Tilburg, 2006), participants were given the following prompt “To what extent do the following statements apply to you, based on how you feel at this moment?”, an example item being “I often feel rejected”. A higher score indicates being more lonely. Four items, taken from the mini-IPIP (Donnellan et al., 2006), tap into Neuroticism, each on a scale from 1-5 (1 strongly disagree, 5 strongly agree), an example being “Get upset easily.” A higher score indicates being more neurotic. Five items from the Rosenberg Self-Esteem Scale (Rosenberg, 1965) tap into self-esteem using a scale of 7 (1 strongly disagree, 7 strongly agree), an example being “I feel that I am a person of worth”. For clarity when comparing self-esteem with loneliness and neuroticism, we coded the variable so that a higher score indicates *worse* self-esteem.

In the predictive validity analyses we control for age (in years), education (highest completed level of education) and gender (female vs. male). We refer to Appendix, Table 10 for the item wording.

Results: Construct validity

Construct validity refers to the extent to which a battery accurately represents the theoretical concept it is intended to measure (McDermott, 2011). We test the construct validity of PMH in four ways. We start with Step 1 (Exploratory) and Step 2 (Confirmatory) of our pre-registered research design: assessing the psychometric properties of our PMH and MH items *separately* to determine if they are reflective of distinct

disorders (anxiety, depression and health) or, of a general conceptualization of (political) mental health. Second, we test the dimensionality of our scales when *combined* to investigate if PMH and MH are part of the same unidimensional mental health construct, or if PMH is indeed an independent dimension - an exploratory test. Third, we test the test-retest reliability of our scales by examining the distribution of PMH and MH across the survey waves. Fourth, we test the discriminant validity: the degree to which a measure does not correlate too strongly with measures of different, theoretically unrelated constructs (Rönkkö & Cho, 2022). To this end, we run pre-registered convergent discriminant tests, by correlating our scales with each other across the survey waves (PMH~MH) and with psychological variables commonly associated with mental health -an exploratory test.

Establishing the psychometrics properties of our political and general items

To assess the psychometric properties of our PMH and MH items, we use Item Response Theory (IRT) (Samejima, 2016). Following our pre-registered split half approach that tests reliability across time (PAP 2:<https://osf.io/3vq7u>) (Anderson & Magruder, 2017), we took a random subset of Wave 1 (PMH $N = 492$; MH $N = 493$) to explore the structure of the PMH and MH items, separately - Step 1(Exploratory). We then confirmed our expectations with the second half of the data (Wave 1); (PMH $N = 477$; MH $N = 474$) - Step 2(Confirmatory).

We utilized an IRT model-the graded response model ((Samejima, 2016); i.e., non-Rasch model for ordinal polychoric data-to determine the psychometric properties of the PMH and MH items, separately. IRTs are suitable for our data (ordinal, polychoric data) and examine the response patterns across the items. This provides insight into how well each item performs in relation to one another and to the overarching latent dimension in question(Depaoli et al., 2018). We used the multidimensional item response theory package (MIRT; (Chalmers, 2012)) and the Maximum Likelihood (ML) estimator to get discrimination parameters. The items were z-standardized for comparison and the PMH and MH items were loaded into two separate models.

The goal here was to identify if our PMH and MH items were reflective of distinct disorders (anxiety, depression and health), or of broader (political) mental health dimensions. First, we ran two *exploratory* GRMs for the exploratory phase, pre-registered our expectations, then ran two *confirmatory* GRMs for the confirmatory phase. For PMH and MH, across both phases, one dimension was present, indicating political

mental health, and mental health constructs.¹

In line with IRT metrics (Samejima, 2016), we considered three fit indices when identifying the performance of the models and items: model fit, item fit and person fit. Our PMH and MH items perform well across the model, item and person fit indices. For both PMH and MH, one dimension was identified, suggesting our items reflect broader political mental health and mental health constructs. See Appendix, Table 6 for the exact fit indices per model.

We also considered the discrimination parameters, how effectively an item differentiates between individuals with different levels of the latent trait being measured (De Ayala, 2013; Hambleton et al., 1991). If an item falls within the identified range, it contributes well to the overarching latent dimension. Due to the polytomous nature of our data we identified, we pre-registered an adequate discrimination parameter range to be between .05 and 4 (De Ayala, 2013; Hambleton et al., 1991).

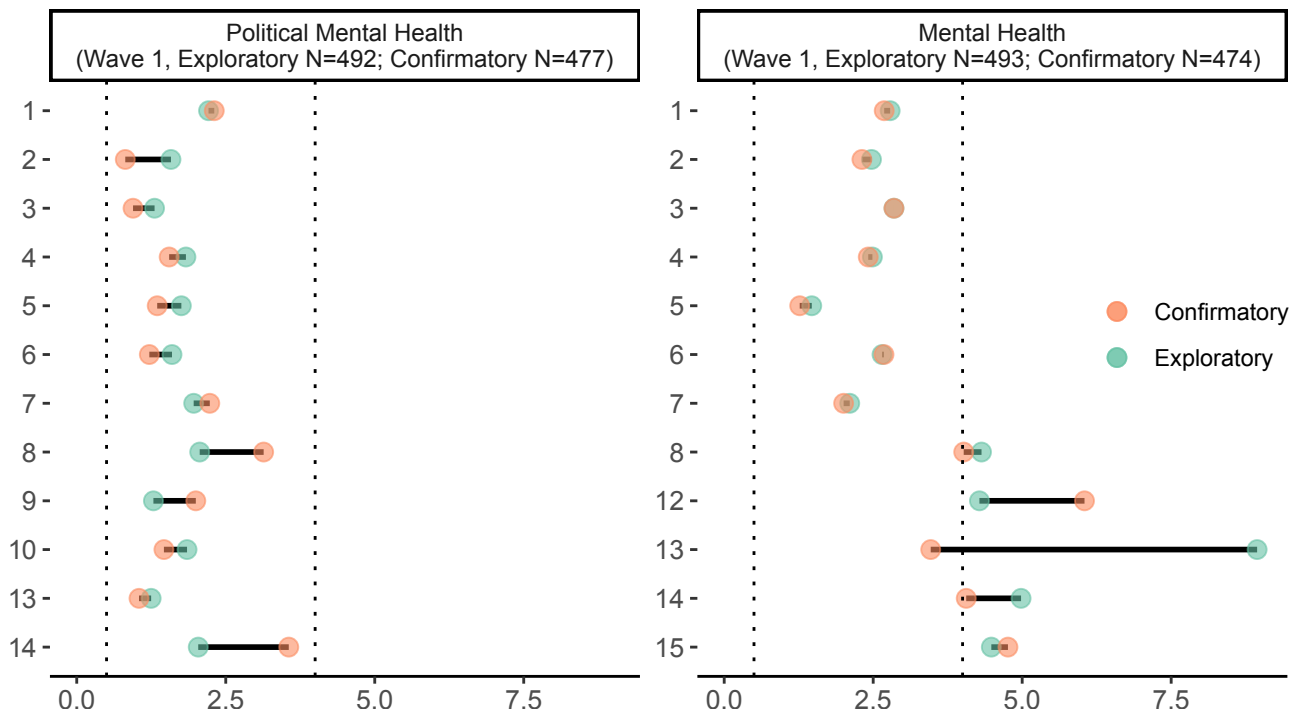
Figure 2 shows the discrimination parameters for the PMH and MH items, respectively, per analysis. For the PMH items, all items fit well in both the exploratory and confirmatory tests. For the MH items, the PHQ-4 (12-15) fell outside of the bounds for the exploratory test. For the confirmatory test these items performed substantially better, with 2 of the 4 items outside of the bounds: 12 (parameter=6.0) and 15 (parameter=4.8). We exclude these items from further analysis, when we curate short-form batteries.

Based on the psychometric properties of the items in Wave 1, we curated short-form 8-item PMH and 8-item MH scales with the items that performed the best. The selected 8-items are in grey in Table 1 and Table 2). Both 8-item scales were included in Wave 2 and Wave 3 and are what we use in the subsequent analyses.

Important to note, is that we constructed our MH battery based on various validated MH scales to closely match the PMH items. To test the construct validity of our MH battery, we correlated our 8-item MH battery at Wave 1 with the validated PHQ-4 (Kroenke et al., 2009) at Wave 1. The correlation was .8, which is considered evidence of convergent validity (Carlson & Herdman, 2012). This test offers more evidence that our MH scale is a valid measure of mental health.

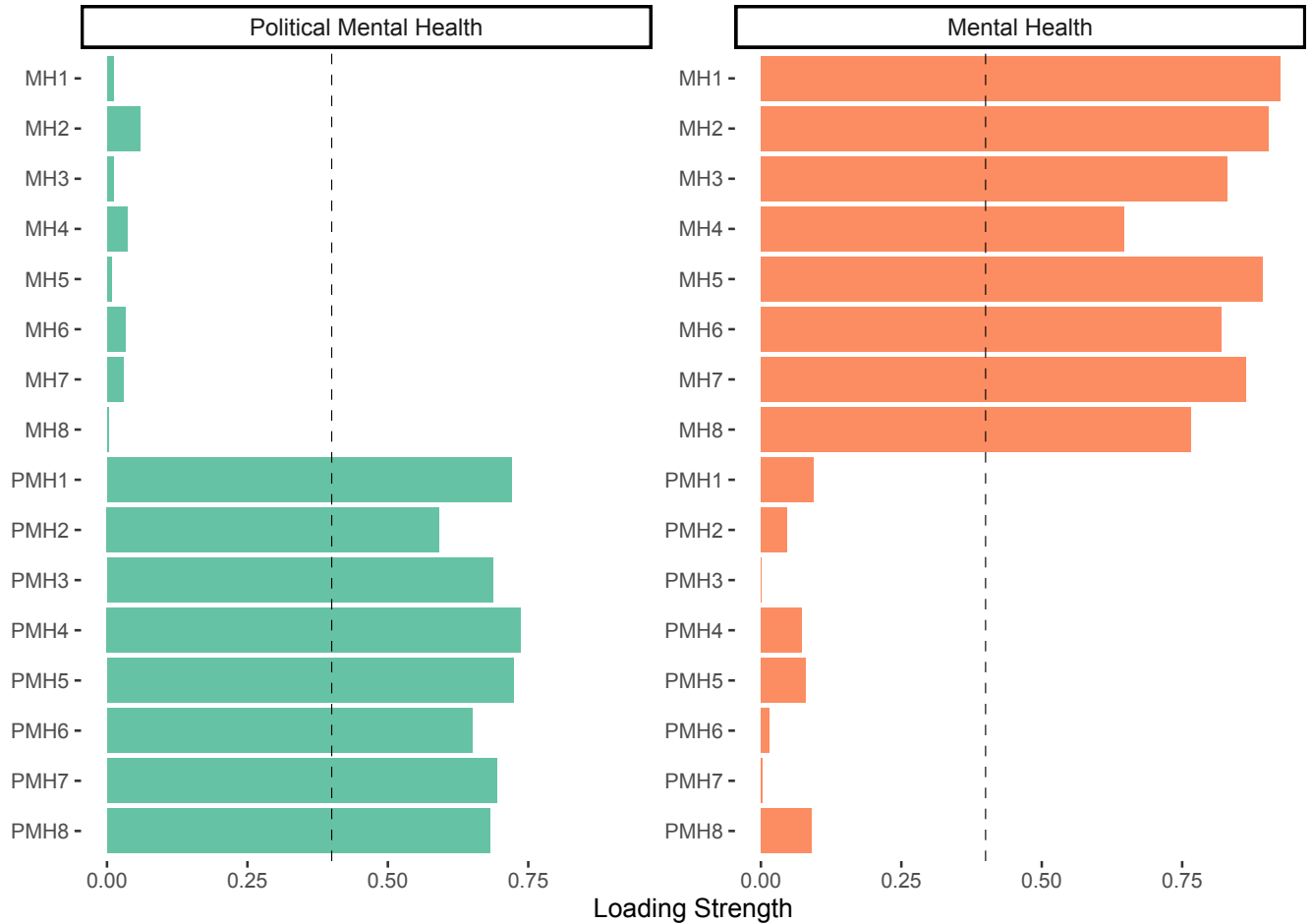
¹For the exploratory analyses a few items did not reach the threshold for valid loadings. As pre-registered, these items were thus excluded from the confirmatory test (see items in bold in Tables 1 and 2).

Figure 2: Discrimination Parameters for Political Mental Health and Mental Health items



Note: The Y axis plots the items by number; see Table 1 and Table 2 for corresponding item wordings. (The items in bold did not load onto any factor during Step 1, so they were excluded from further analysis and are subsequently **excluded from this plot**.) The X axis plots discrimination parameters. The orange dot represents the confirmatory test, the green dot represents the exploratory test. The dotted lines indicate the pre-registered acceptable item performance (range: 0.05 to 4).

Figure 3: Test of Dimensionality: PMH and MH



Note: This plots the loadings for our PMH and MH items - combined from Wave 1 and Wave 2. The panel to the left, plots the loadings for dimension 1, and consists of the 8 PMH items (in green). The panel to the right, plots the loadings for dimension 2, and consists of the 8 MH items (in orange).

Testing the dimensionality of our PMH and MH scales

Next, we turn to a series of tests to determine if PMH and MH are independent of one another. We first, took the items from our short-form batteries from Wave 1 and Wave 2 for those participants that responded to both scales (for example, someone who responded to PMH in Wave 1 and MH in Wave 2, or vice versa) and loaded them into a graded response model ($N = 766$, model fit: RSMEA:.05, SMRI:.04, CFI:.97, TLI:.97). Figure 3 demonstrates that the items load onto two separate dimensions: the PMH items loading onto the first dimension (in green) and the MH items load onto the second (in orange). These results give us preliminary evidence that PMH and MH are two independent empirical concepts.

Test-retest reliability

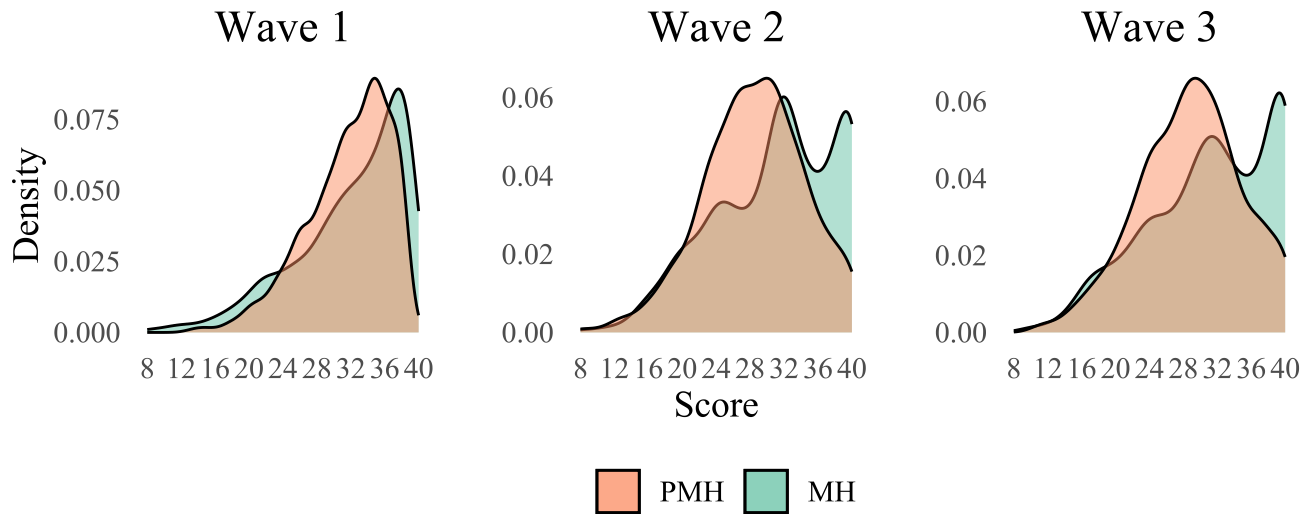
We next examined the distribution of PMH and MH across the three survey waves (Maxwell & Delaney, 1985). Figure 4 presents density plots for PMH and MH at Wave 1, 2, and 3. The lowest PMH/MH score is 8 (severe PMH/MH problems) and the highest score is 40 (very good PMH/MH). PMH and MH are generally high, indicating that most people have relatively good PMH/MH. Yet, a sizable group has moderately poor PMH/MH with scores below 24 (the mid-point). Following a cut-off score that is common in mental health research (Kroenke et al., 2009), a smaller group has moderately severe PMH/MH problems with scores at or below 16.

Across all three waves, and controlling for repeated measures, 19.35% of participants demonstrate moderately poor PMH, while 17.7 % displayed moderately poor MH. 2.3 % demonstrate severe PMH problems and 3.1 % demonstrate severe MH problems. Applying the observed proportion of poor PMH to the Dutch adult population (statistics derived from the Centraal Bureau voor de Statistiek) suggests that approximately 3.8 million individuals may experience poor PMH. However, this estimate assumes the sample is broadly reflective of the population and should be considered indicative rather than definitive.

Next, we explore the stability of PMH and MH across the survey waves using Kolmogorov-Smirnov (KS) and intraclass correlation coefficient (ICCs) (Weir, 2005) tests, at the latent dimension level. KS tests demonstrated that both PMH and MH distributions differed significantly between Wave 1 and Wave 2 (PMH: $D=0.273$, $p<.001$; MH: $D=0.161$, $p<.001$), but not between Wave 2 and Wave 3 (PMH: $D=0.036$, $p=.570$; MH: $D=0.034$, $p=.636$), indicating stability after Wave 2. ICCs supported this stability. PMH showed moderate reliability across waves (ICC=0.62, 95%CI[0.60, 0.64]) (Koo & Li, 2016) and improved when averaged (ICC=0.83,[0.82, 0.84]). MH demonstrated good individual-level reliability (ICC=0.69,[0.67, 0.71]) (Koo & Li, 2016), increasing when averaged (ICC=0.87,[0.86, 0.88]). Overall, both measures exhibited acceptable temporal stability, with MH somewhat more consistent at the individual level. Thus, while both measures are generally stable, PMH could be more sensitive to fluctuation, an issue we return to in the discussion.

Additionally, we find no significant baseline differences in PMH/MH between participants who continued to Wave 2 and the full Wave 1 sample, ruling out attrition bias (results can be derived from the replication files).

Figure 4: Density plot of the distribution of PMH and MH across the panel waves



Note: The three panel waves are plotted from left to right. The Y-axis indicates the density of responses to our PMH and MH batteries; the X-axis represents raw scores ranging from 8 to 40. A higher score indicates better PMH/MH, a lower score indicates worse PMH/MH. PMH is shown in orange, MH in green.

Testing the discriminant validity of PMH and MH

To further the assessment of the construct validity of PMH and MH we turned to discriminant validity. Evidence for discriminant validity is provided when PMH and MH have a relatively low correlation. In line with Akoglu, 2018's guidelines, we pre-registered a low correlation to be below .5 -see PAP 3: <https://osf.io/makdf>). The bivariate correlations between PMH and MH were low across all time points. The weakest association was observed between PMH at Wave 1 and MH at Wave 3 ($r = .31, N = 348$), while the strongest occurred between PMH at Wave 2 and MH at Wave 1 ($r = .41, N = 384$). These correlations are in line with what Weinschenk and Smith, 2024 found regarding the correlation between political and general anxiety. See the Appendix, Table 7 for the full set of cross-construct correlations.

Further evidence for the discriminant validity of PMH and MH comes from examining their associations with related psychological constructs. If PMH and MH are indeed distinct, we would expect the MH battery to show stronger correlations with established psychological indicators of mental distress than the PMH battery. To test this, we correlated both PMH and MH with three relevant psychological metrics commonly associated with mental health (Rönkkö & Cho, 2022): loneliness (Hards et al., 2022), neuroticism (Ormel et al., 2013), and self-esteem (Moksnes & Reidunsdatter, 2019; Yu et al., 2012).

We find evidence for discriminant validity. The MH battery correlates much stronger with loneliness ($r = -.22$, $N = 687$) compared to the PMH battery ($r = -.06$, $N = 668$). Similar findings are observed for neuroticism, where the MH battery shows a stronger association ($r = -.67$, $N = 660$) than the PMH battery ($r = -.3$, $N = 675$), and for self-esteem, with correlations of $r = -.61$ ($N = 779$) for MH and $r = -.30$ ($N = 697$) for PMH. These divergent patterns of association further support the view that PMH and MH operate as distinct constructs, rather than as interchangeable indicators of mental health.

Results: Predictive Validity

Linear regression analyses: Exploratory and Confirmatory

Next, we test the predictive validity of our PMH and MH scales across a range of political correlates. We start with Step 3 (Exploratory) and Step 4 (Confirmatory) of our research design (Figure ??). We run exploratory analyses with Wave 1 (the second half of the split half), pre-register hypotheses based on these exploratory findings (PAP 3:<https://osf.io/makdf>), then test our expectations with Wave 3.

For the exploratory phase we ran a series of linear regression analyses with the political correlates as the outcome variables and PMH, MH and a dummy variable “Battery” (1 = PMH questionnaire and 0 = MH questionnaire) as predictors. We interact the dummy with the mental health variable to determine whether the associations to political outcomes differed across the two independent groups. The following political correlates were outcome variables: Political participation, news aversion, political interest, external political efficacy, confidence in political knowledge, right-wing ideology, affective polarization, ideological extremism and conspiracy mentality. We control for age, gender and education.

$$\text{Political outcome}_i = \alpha + \beta_1 \text{Mental Health}_i + \beta_2 \text{Battery (PMH=1, MH=0)} + \beta_3 \text{Mental Health} * \text{Battery}_i + \beta_4 \text{Gender}_i + \beta_5 \text{Age}_i + \beta_6 \text{Education}_i + \varepsilon_i \quad (1)$$

To replicate our findings from Wave 1, we ran -as pre-registered- confirmatory models with the political correlates included in Wave 3: political participation, conspiracy mentality, news aversion, political interest, and right-wing ideology. We also include anti-democratic attitudes, included in Wave 3 but not in Wave 1. The controls were held constant.

We present the results of the Exploratory (Wave 1) and Confirmatory (Wave 3) models in Figure 5. To facilitate comparability, results are plotted in a panel per political outcome.

Political Engagement

We first present the results for the political engagement correlates: political participation, news aversion, political interest, confidence in political knowledge and external political efficacy. In Wave 1 and Wave 3, and in line with our pre-registered hypothesis, we find that PMH (Wave 1 $b = -.27$, $p < .001$; Wave 3 $b = -.3$, $p < .001$) and MH (Wave 1 $b = -.15$, $p < .001$; Wave 3 $b = -.1$, $p < .001$) are negatively associated with political participation (Panel A). In Wave 3, we are underpowered to reliably detect the MH estimate, however, overlapping confidence intervals suggest the estimate is not significantly different than the estimate at Wave 1, indicating evidence for a small effect of MH. To summarize, poor PMH and poor MH are associated with a greater likelihood of political participation.

News aversion (Panel B) is negatively associated with PMH across both waves (W1 PMH $b = -.22$, $p < .001$; W3 PMH $b = -.3$, $p < .001$) and with MH in Wave 3 (MH $b = -.14$, $p < .001$).² Political efficacy (Panel C), only measured in Wave 1, is positively associated with PMH and MH (PMH $b = .15$, $p < .001$; MH $b = .13$, $p < .01$), suggesting better PMH and better MH is associated with greater political efficacy. Similarly, political interest (Panel D) is negatively associated with both PMH and MH, however, we are underpowered to reliably estimate these effects. The same goes for the associations for confidence in political knowledge (Panel E).

Political Ideology

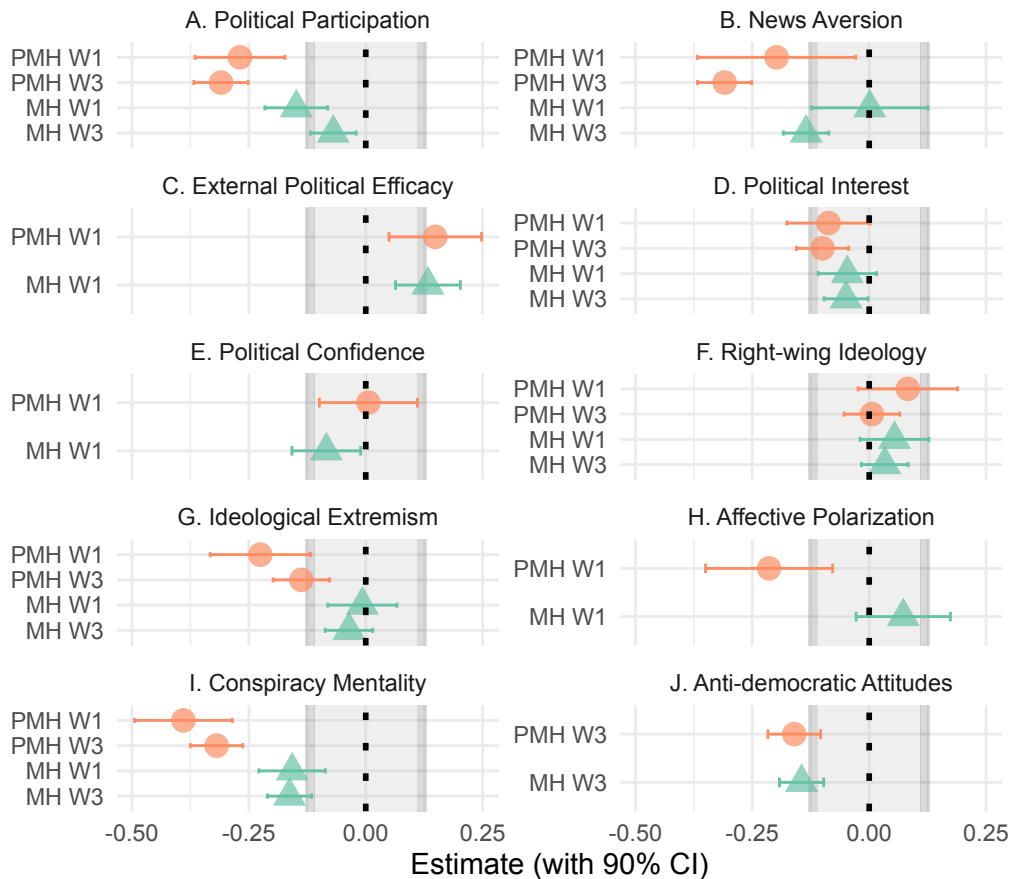
In line with previous literature that suggests right-wing ideology is associated with being happier (Napier & Jost, 2008; Schaffner et al., 2025), right-wing ideology is associated with better MH and PMH (Panel F). These effects are too small to reliably detect, but are of a similar magnitude to what has been found in previous literature. Turning to ideological extremism (Panel G), PMH and MH are negatively associated with ideological extremism, with PMH estimates we are sufficiently powered to detect at Wave 1 ($b = -.23$, $p < .001$) and Wave 3 ($b = -.14$, $p < .001$). Poor PMH is associated with being more ideologically extreme.

Affective polarization (Panel H) is negatively associated with PMH at Wave 1 ($b = -.21$, $p < .001$) suggesting poor PMH is associated with greater affective polarization. Conspiracy mentality (Panel I) is nega-

²Note that we used a different measure of news avoidance at Wave 1 and Wave 3 which might explain the different results.

tively associated with PMH and MH in Wave 1 (PMH $b = -.39$, $p < .001$; MH $b = -.16$, $p < .001$) and in line with our pre-registered expectations, in Wave 3 (PMH $b = -.32$, $p < .001$; MH $b = -.16$, $p < .001$). Individuals with poor PMH and MH are more likely to engage in conspiracy mentality. Anti-democratic attitudes (Panel J) are negatively associated with poor PMH and MH at Wave 3 (PMH $b = -.16$, $p < .001$; MH $b = -.14$, $p < .001$), suggesting individuals with poor PMH and MH also report more anti-democratic attitudes.

Figure 5: Exploratory (Wave 1) and Confirmatory (Wave 3) Regression Estimates for Political Correlates



Note: This plots the regression estimates with pre-registered 90% confidence intervals per political correlate. The Y axis plots PMH and MH per wave. The X axis plots the estimates. A negative coefficient indicates poor PMH/MH, positive coefficients indicates good PMH/MH. Orange circles represent PMH. Green triangles represent MH. Shaded areas mark the range between $b = -.11$ and $b = .11$ (Wave 3) and $b = -.13$ and $b = .13$ (Wave 1) which represents the zone of population-level effects that we are underpowered to detect reliably (power=.80, $\alpha = .10$). The Ns per analysis is as follows: A. Political participation (W1=949, W3=1,826), B. News Aversion (W1=751, W3=1,826), C. Political interest (W1=949, W3=1,826), D. Political efficacy (W1=762), E. Political confidence (W1=762), F. Right-wing ideology (W1=758, W3=1,826), G. Affective polarization (W1=462), H. Ideological extremism (W1=758, W3=1,826), I. Conspiracy Mentality (W1=765, W3=1,826), J. Anti-democratic attitudes (W3=1,826).

Benchmarking our effect sizes within the mental health literature

The well-powered effect sizes for the associations between PMH/MH and the political correlates range from $b=.11$ to $b=.27$. Yet, how meaningful are these effects for research in political psychology (Arce-neaux et al., 2025)? To answer this question, we benchmark our associations between political outcomes and PMH/MH by comparing our effect sizes with common demographic characteristics and psychological correlates of mental health, namely: age (Gupta, 2016), education (Niemeyer et al., 2019), gender (Rosenfield & Mouzon, 2013), loneliness (Hards et al., 2022), neuroticism (Ormel et al., 2013) and self-esteem (Moksnes & Reidunsdatter, 2019). This test was not pre-registered, however, we expected to find the most substantial associations between MH and neuroticism and self-esteem, two variables that demonstrate the most consistency in the literature. We ran a linear regression with the PHQ-4 (Wave 1) – a valid measure of mental health ((Kroenke et al., 2009)) – as the outcome variable and the following correlates (Wave 1): age, education, gender, loneliness, self-esteem and neuroticism ($N = 962$). All variables were z -standardized. Due to the randomization of psychological correlates during data collection, when including all of the psychological correlates in the same model, the sample size is reduced substantially ($N = 356$). Therefore, we utilized a simple, unconditional mean imputation across the correlates (Gómez-Carracedo et al., 2014): loneliness, neuroticism and self-esteem.

Neuroticism ($b=.36$, $p<.001$), self-esteem ($b=.35$, $p<.001$) and age ($b=.13$, $p<.001$) demonstrated positive, statistically significant associations to the PHQ-4 (Kroenke et al., 2009). In line with previous literature (Moksnes & Reidunsdatter, 2019; Ormel et al., 2013), individuals with poor mental health demonstrated higher levels of neuroticism and worse self-esteem. Additionally, age has a small, positive effect, suggesting an increase in age is associated with a decline in mental well-being (the literature on age and mental health is mixed, see: (Gupta, 2016; Jones, 2013)). The well-powered effect sizes of our political correlates range from $.11$ to $.27$, effect sizes that are comparable to the common correlates of mental health documented in the same dataset. The socio-political correlates of PMH and MH are of similar magnitude and therefore, imply they are meaningful effects.

Exploring the differential effects of PMH and MH

In two exploratory tests, we further assess the effects of PMH and MH. First, we tested whether the effect of one construct depends on the level of the other using linear regressions with an interaction term ($\text{PMH} \times$

MH). PMH and MH scores were averaged and standardized across Waves 1 and 2 (when available), which allowed us to include a test of the same individuals across both variables. For the political correlates we averaged and standardized scores across Waves 1 and 3 when measured at both time points: political participation (N=778), conspiracy mentality (N=754), news aversion (N=756), ideological extremism (N=759), political interest (N=778) and right-wing ideology (N=759). Main effects represent the effect of one predictor at the mean of the other. Only statistically significant interactions are reported here and full estimates are provided in Appendix, Figure 7.

$$\text{Political Outcome}_i = \alpha + \beta_1\text{PMH}_i + \beta_2\text{MH}_i + \beta_3\text{PMH}_i*\text{MH}_i + \varepsilon_i \quad (2)$$

The moderation models revealed the following patterns: PMH negatively predicted political participation ($b=-0.10$, $p<0.01$) and ideological extremism ($b=-0.15$, $p<0.001$) when MH was at its mean, while the interaction was positive and significant in both cases (participation: $b=0.06$, $p<0.05$; extremism: $b=0.08$, $p<0.01$), indicating that higher MH attenuates the negative effect of PMH on these political outcomes. We also ran models for our psychological correlates. For self-esteem (N=633), MH showed a strong negative main effect ($b=-0.52$, $p<0.001$), with a positive and significant interaction ($b=0.05$, $p<0.05$), suggesting that higher PMH reduces the negative impact of MH on self-esteem.

Second, we conducted an exploratory variance decomposition analysis (Snoek et al., 2023) to determine the proportion of variance PMH and MH account for across the following political outcomes: political participation, conspiracy belief and news aversion – we focus on these because they are the political correlates included at W1 and W3 that had effects we could reliably detect in our pre-registered regression models. A variance decomposition analysis decomposes the explained variance (R^2) of the model into components attributable to PMH and MH independently *and* takes into account their shared variance. Important to note is where the interaction terms indicate whether their effects on outcomes are contingent upon one another, the proportion of shared variance tells us how much predictive power PMH and MH have in common. In other words, it helps us explore the question: does PMH explain aspects of political outcomes that MH does not?

$$\text{Political Outcome}_i = \alpha + \beta_1\text{PMH}_i + \beta_2\text{MH}_i + \varepsilon_i \quad (3)$$

For political participation ($R^2 = 0.027$), news aversion ($R^2 = 0.025$), and conspiracy mentality ($R^2 = 0.057$), the majority of explained variance was uniquely attributable to PMH (53–61%), with MH accounting for 11–16%, and the remainder shared (31–29%). For these political outcomes, PMH provides unique explanatory power not captured by MH. For psychological outcomes (self-esteem, loneliness, neuroticism) you see the opposite pattern emerge, MH accounted for most of the explained variance (see Appendix Table 11), providing unique explanatory power not captured by PMH.

To summarize, these exploratory findings suggest tentative evidence that first, the influence of one form of mental health can be moderated by the level of the other, highlighting conditional relationships for some outcomes but independent effects for others. Second, PMH and MH demonstrate different patterns of association: PMH explains variance above and beyond MH when it comes to political attitudes and behaviors while MH explains variance above and beyond PMH when it comes to internal psychological states.

Conclusion and Discussion

We set out to determine if and to what extent domain-specific political mental health and general mental health differ in terms of construct and predictive validity. We deepened the literature on mental health and politics by testing and comparing PMH’s construct validity to MH. First, we identified that in our data, (political) anxiety, (political) depression and (political) health are reflective of general (political) mental health dimensions. Next, through a series of tests, we identified that PMH and MH are two distinct, independent concepts. We broadened the literature by testing and comparing PMH’s predictive validity with MH. We established PMH and MH are associated with a range of political correlates – with effect sizes of a similar magnitude to common MH correlates – and demonstrate differential effects dependent on the substantive domain. PMH is more closely associated with politics: PMH explains unique variance above and beyond MH. MH is more closely associated with psychological states: MH explains unique variance above and beyond PMH. Our tests of moderation however, provide preliminary evidence for the claim that while independent, PMH and MH are also in some cases, related constructs.

A turn to domain specific measures is a way to name the toll politics may be taking on individual's well-being. As such, we extend the work of Smith et al., 2019, who put forth the concept of political health, by testing and comparing the construct and predictive validity of political mental health (an extended version of their short-form political health scale) to that of mental health. Our findings echo Weinschenk and Smith, 2024's work on the difference between political and generalized anxiety and importantly, provide robust evidence for the need to widen our scope to include domain-specific measures when it comes to understanding the complex relationship between mental health and politics moving forward. In the discussion that follows, we first outline the main limitations of our study design and then delve into implications of our findings for future work.

Limitations and suggestions for further research

An emerging line of literature focuses on the political correlates of mental health (Albright & Hurd, 2023; Bernardi, 2021; Bernardi, Mattila, et al., 2023; Bernardi et al., 2024; Toff & Kalogeropoulos, 2020), while another, which includes the move to domain-specificity, focuses on the health consequences of politics (Nayak et al., 2021; Smith et al., 2019; Weinschenk & Smith, 2024). So far, most work implying that politics has implications for mental health, is conducted in the United States (Nayak et al., 2021; Smith et al., 2019). We extended the study of domain-specificity to the Netherlands, another Western democracy. The question remains however to what extent our findings replicate across other national contexts and with that, other political systems (i.e., democratic, authoritarian, etc.). We welcome more research validating PMH by both establishing measurement invariance across contexts, and further testing its predictive validity across political behaviors and outcomes in other nations.

Important to recognize, is that our data reflected back to us a two-dimensional conceptualization of political and general mental health, leading us not to test disorder specific associations with our political correlates. We believe future research on mental health and politics would benefit from incorporation of the study of PMH as a uni-dimensional concept, while not neglecting the validity in continuing to explore the nuances at play between different general mental health disorders and political behaviors. The existence of PMH, along with its potential for a synergistic relationship to MH, demonstrates if anything, that more attention ought to be paid to these intersections.

A key question arises from our findings: to what extent does politics impact P(MH) and to what extent does P(MH) impact politics? The emergence of domain-specific political mental health confirms that people

perceive politics as a detriment to their well-being. On the other hand, PMH and MH's associations to a range of political correlates implies a potential bidirectional relationship. Unfortunately, due to choices in our research design, too few people have repeated measures of PMH (or MH) and political outcomes to explore the causal nature of the relationships between PMH, MH and our political correlates. However, given the inherent complexity within these relationships, we believe a test of causality is best done through a design based approach (Arceneaux et al., 2025), an approach we consider to be the gold-standard for beginning to disentangle the directional and predictive associations between political behaviors, attitudes and PMH and MH.

Our test-retest reliability findings suggest that PMH is slightly more sensitive to fluctuation in comparison to MH. As previous work has utilized experience sampling to study the relationship between emotion regulation and well-being (Buttgereit & Bakker, 2024; Ford & Feinberg, 2020), this method could also allow for a more direct test of short term fluctuations in mental health symptomatology and help us understand the ways in which PMH operates in individuals' lives over time.

We would be remiss to not also underscore the importance of a qualitative approach to better understand how individuals contextualize their PMH and/or MH as it relates to the political terrain. For instance, in-depth interviews (Farber, 2018) could be a direct way to further explore how individuals perceive their PMH in relation to both their general MH and political engagement. In sum, given the complexity within the topic, the study of mental health and politics would benefit from a mixed-methods approach moving forward.

Towards the next generation of research on health and politics

In the remainder of the discussion, we discuss how our findings inform the next generation of research on health and politics. We do this using a series of six research questions. These are not exhaustive of what could be studied in this exciting research agenda, but are some we think are pressing to answer.

First, *is PMH a problem of the politically engaged?* The political correlates associated with poor PMH and MH, from political participation and conspiracy mentality to news aversion, reflects a striking sentiment: they are reflective of someone's *level of engagement* with politics. Previous work has found that liberals and younger people display worse political health (Smith et al., 2019). Others have argued minorities, such as immigrants (Offidani-Bertrand, 2023), members of the LGBTQIA+ community (Russell et al., 2011) and women (Ortlund et al., 2025), are more likely to be negatively affected by politics. While the focus of our

study was to validate the concept of domain-specific political mental health, our findings align with prior work in the sense that political engagement or proximity is likely associated with P(MH) challenges.

Second, *what is the interplay between PMH and political radicalization?* While conventional wisdom suggests poor mental health plays a role in facilitating political radicalization, the evidence for this claim is mixed (Misiak et al., 2019). Our data however, hints at a tentative link between poor *PMH* and radical political tendencies, in the form of conspiracy mentality, anti-democratic attitudes and ideological extremism. Just as chronic stress can lead to a host of dysregulated behaviors, from heightened emotional reactivity to dichotomized thinking (Golkar et al., 2014; Marin et al., 2011), chronic stress induced from politics (Tsakiris, 2020) could be leading to *politically* dysregulated behaviors (see Edinger et al., 2025's work on polarization and cognitive distortions, for example). Future work could explore the relationship between poor PMH and political radicalization also, how this association interacts with one's psychological dispositions (Fluit et al., 2023; Peterson et al., 2025) and mental health status.

Third, what does PMH and its prominence in predicting political outcomes imply about our political world? In our data, 21.7% of Dutch participants who completed the questionnaire demonstrate moderately poor PMH to severe PMH problems - suggesting approximately 3.18 million Dutch adults suffer from PMH problems. As a result, disengagement from politics could be a protective mechanism individuals employ to deal with the political world around them. In their work on emotion regulation and political action taking, Ford and Feinberg (2020) find just this, and suggest a democratic trade-off is taking place: to preserve their emotional well-being people disengage from the political process. Various perspectives on mental health (Alegría et al., 2018; Butler et al., 2011; Kumsta, 2019; Sampogna et al., 2024) contend that the environment one lives in plays a critical role in the development or sustainment of mental health disorders. The emergence of PMH may be a direct reflection of this sentiment: the political landscape we find ourselves in may be an overwhelming one, one that individuals do not yet have the skills to cope with, though we believe that the ability to adapt is not forgone.

Fourth, *can we treat PMH by turning to insights from clinical psychology and neuroscience?* Recent work suggests that individuals with greater interoceptive capability (attunement to inter bodily feelings) are more resilient to the political world, suggesting interoception may serve a protective function from the harmful health impacts of politics (Arceneaux & Vander Wielen, 2017; Von Mohr & Tsakiris, n.d.). This finding is in line with how somatic based therapies -therapies that address both the mind and the body in treating mental health issues- (Kuhfuß et al., 2021; Noetel et al., 2024; Rhodes et al., 2016) have been found

to have a substantial effect on alleviating symptoms of depression and anxiety. These therapies aim to not just reduce symptoms through developing greater connection to the body, but help individuals learn how to healthily engage with the unpredictable (and often triggering) world around them through such awareness. When it comes to politics, by becoming fluent in the signs and signals of the nervous system individuals can learn how to place healthy boundaries around how, when and how often to engage with politics, moving on from a zero-sum relationship. Developing greater awareness of our bodies can support us in learning how to sit with the discomfort that arises from negative political emotions in a contained way -discomfort that is often a pre-requisite for a call to democratic action- a call that avoidance might lead one to miss. Future work could begin to test interventions that aim to alleviate symptoms of poor PMH and simultaneously teach ways to build physiological resiliency through clinically tested somatic modalities that increase interoceptive awareness, such as but not limited to yoga (Neukirch et al., 2019) and mindfulness techniques (Ramstetter, 2021).

Fifth, are there solutions to poor PMH to be tailored not only at individuals but at our political institutions and media landscape? We would be remiss to not acknowledge that at its core, PMH is a *collective* phenomenon. For example, previous work has found that solution based journalism -journalism that highlights solutions to societal problems- lead to less overall negative affect and emotions (McIntyre, 2019; Thier, 2024). Wherever individuals get their news, be it social media platforms, broadcast programs or the local newspaper, journalists and companies could play a more conscious role in working to facilitate a healthier, less polarizing news media landscape.

Sixth, are we underestimating the effects of politics on MH when we focus on PMH? The mere existence of PMH as a distinct concept to MH implies that our current mental health models underestimate or neglect the role of politics in contributing to or exacerbating mental health issues. The moderation analyses provide tentative evidence that these constructs can interact, highlighting a dynamic relationship worth further longitudinal investigation: the adverse impacts associated with political engagement could be a contributing factor to a decline in mental well-being. The findings here also have clinical implications, suggesting a need for clinicians to widen their scope to include the potential interplay between a client's mental health and the political landscape.

We believe these six questions are among the most pressing to answer. Our data suggests PMH is associated with a range of relevant political outcomes and behaviors. Moving forward, more attention ought to be paid to the political implications of poor *PMH* and how it might be related to political radicalization

and polarization but also, to the harmful effects of engaging with a overwhelming political world. The ways in which PMH and MH demonstrate independent and moderating effects on political outcomes suggests that building physiological resiliency may not just benefit the individual, but our politics as well. This also affords us a hopeful view: healing our politics may coincide with healing our citizenry.

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1 Appendix

Table 3: Overview of variables collected across survey waves and their use in analyses

Variable	W1	W2	W3	Construct Validity	Predictive Validity
Political Mental Health	✓	✓	✓	Graded response models (item psychometrics & dimensionality), test-retest reliability & discriminant validity	Linear regressions, moderation & variance decomposition
Mental Health	✓	✓	✓		
Political Participation	✓		✓		Linear regressions, moderation & variance decomposition
News Aversion	✓		✓		Linear regressions, moderation & variance decomposition
External Political Efficacy	✓				Linear regressions
Political Interest	✓		✓		Linear regressions & moderation
Confidence in Political Knowledge	✓				Linear regressions
Right-wing Ideology	✓		✓		Linear regressions & moderation
Ideological Extremism	✓		✓		Linear regressions & moderation
Affective Polarization	✓				Linear regressions
Conspiracy Mentality	✓		✓		Linear regressions, moderation & variance decomposition
Anti-democratic Attitudes			✓		Linear regressions

Table 4: Attrition across Waves

Wave	N	Retained	Attrition Rate
Wave 1	2060	-	-
Wave 2	2149	1645	20.15 %
Wave 3	1961	1730	19.5 %

Table 5: Cronbach's Alpha for Variables Across Waves

	Alpha	Wave
MH	0.93	Wave 1
PMH	0.85	Wave 1
Conspiracy Belief	0.90	Wave 1
Activism	0.82	Wave 1
MHW	0.93	Wave 3
PMH	0.85	Wave 3
Conspiracy Belief	0.88	Wave 3
Activism	0.85	Wave 3

Table 6: IRT fit indices

Model Fit	Exploratory			Confirmatory		
	RMSEA	SRMR	CFI/TLI	RMSEA	SRMR	CFI/TLI
PMH	.08	.07	.94/.94	.09	.08	.90/.90
MH	.09	.07	.96/.96	.07	.06	.99/.98

Item Fit: All items satisfactory (S- X^2 $p < .05$; BH corrected)

Person Fit (infit / outfit)		
PMH	3.5% / 2.2%	2.7% / 2.3%
MH	11.4% / 3.4%	5.1% / 1.7%

Figure 6: Factor Loadings for Exploratory and Confirmatory Tests - Wave 1

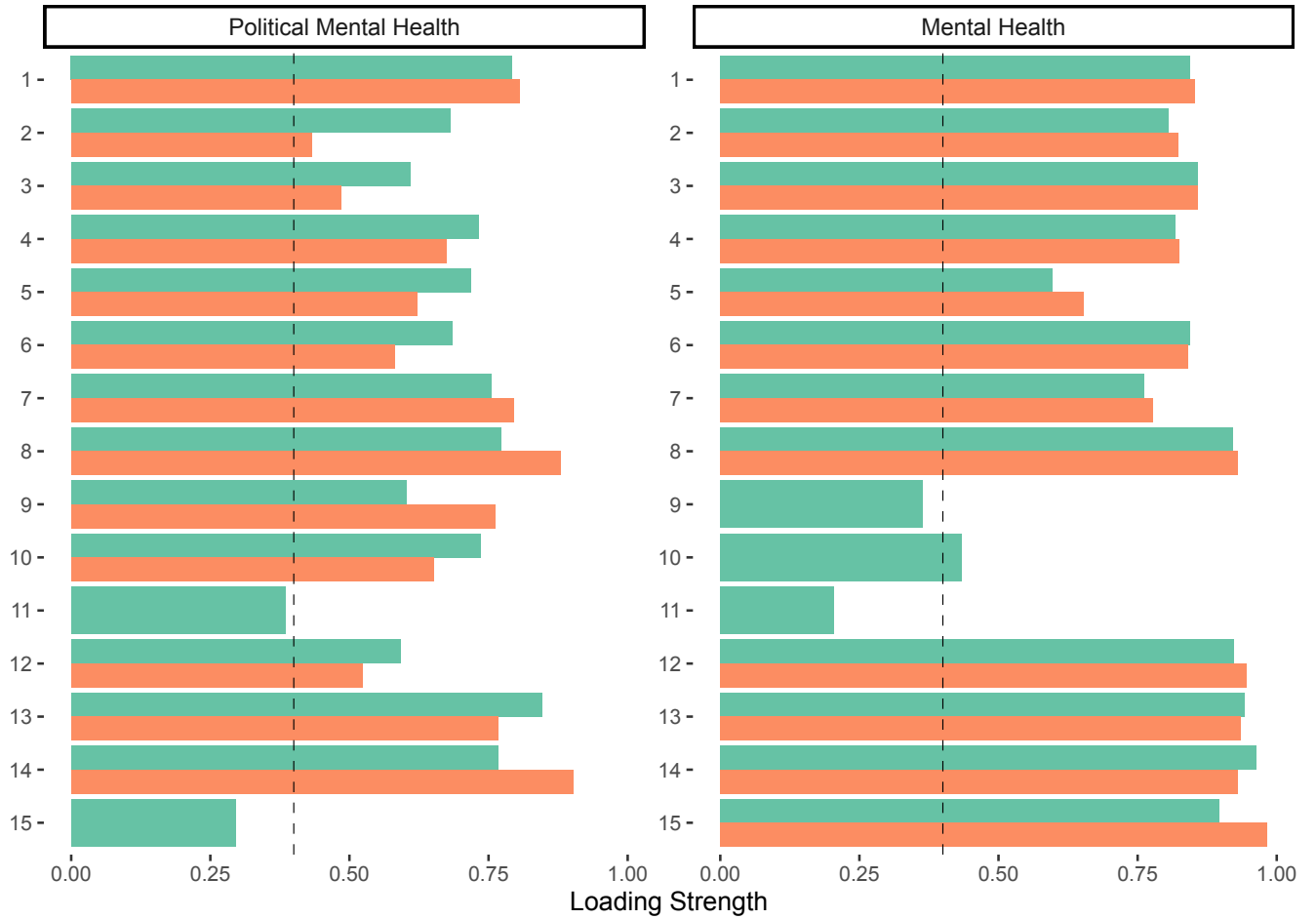


Table 7: Cross Construct Correlations across Waves

Comparison	Correlation	N
PMH W1 ~ MH W2	0.35	390
MH W1 ~ PMH W2	0.40	384
PMH W2 ~ MH W3	0.40	386
MH W2 ~ PMH W3	0.41	397
MH W1 ~ PMH W3	0.37	306
PMH W1 ~ MH W3	0.32	348

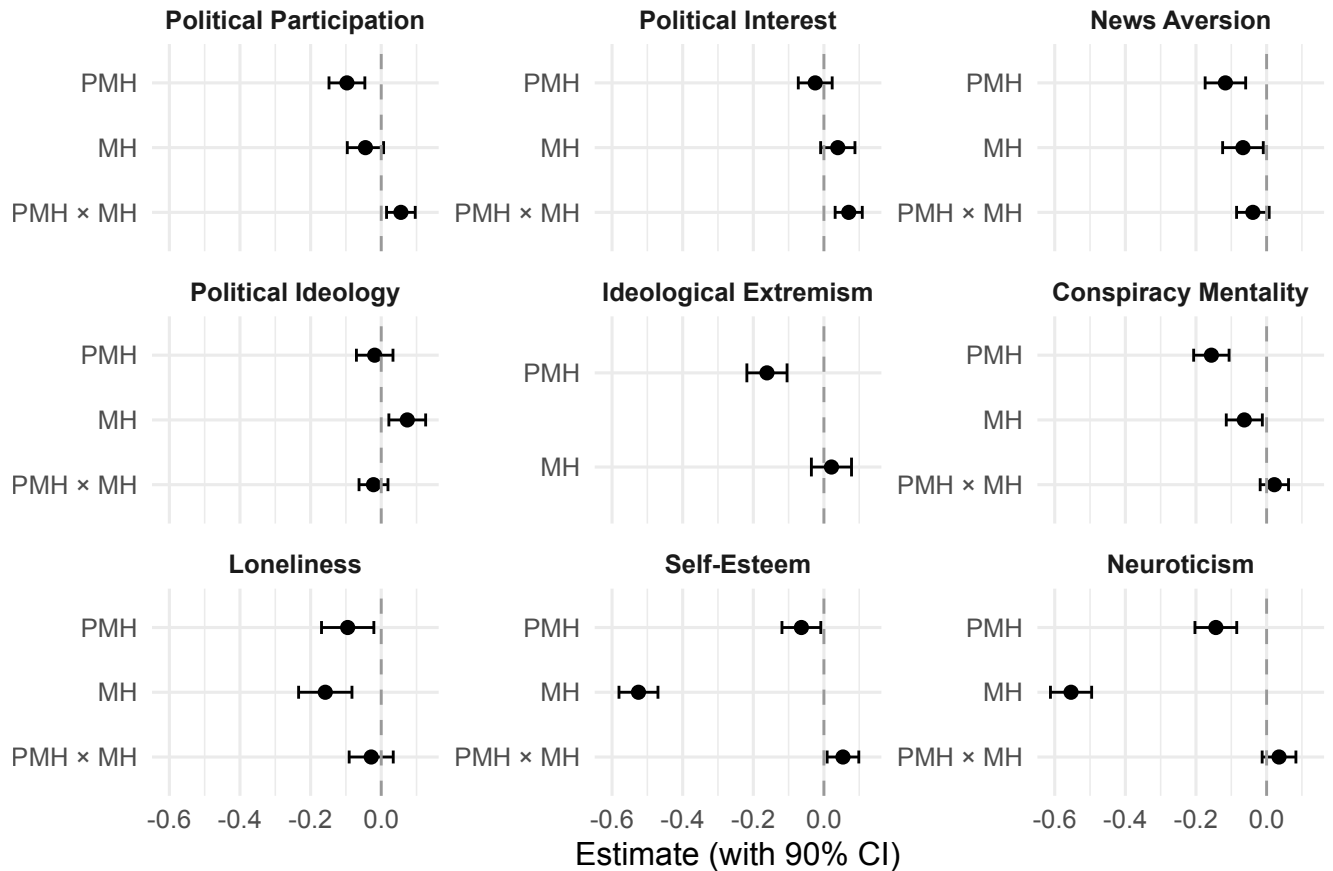
Table 8: Within construct correlations across waves

Comparison	Correlation	N
PMH W1 ~ PMH W2	0.604	374
PMH W1 ~ PMH W3	0.556	347
PMH W2 ~ PMH W3	0.658	389
MH W1 ~ MH W2	0.683	365
MH W1 ~ MH W3	0.660	339
MH W2 ~ MH W3	0.708	392

Table 9: Correlations between psychological metrics and PMH/MH across the waves

	PMH W1	MH W1	PMH W2	MH W2	PMH W3	MH W3
Self-Esteem	-0.28 (N=767)	-0.61 (N=781)	-0.25 (N=626)	-0.5 (N=596)	-0.23 (N=531)	-0.49 (N=554)
Neuroticism	-0.3 (N=699)	-0.67 (N=662)	-0.37 (N=539)	-0.55 (N=544)	-0.32 (N=477)	-0.6 (N=485)
Loneliness	-0.06 (N=670)	-0.22 (N=689)	-0.14 (N=546)	-0.17 (N=532)	-0.08 (N=477)	-0.2 (N=470)

Figure 7: Differential effects of PMH and MH



Note: This plots the estimates (X-axis) for PMH, MH and their interaction (Y-axis) per political and psychological correlate.

Table 10: Control variables used in the study

	Gender	Age	Education
Item wording	What is your gender?	What is your age?	What is the highest level of education you have completed?
Response categories	Man, woman, non-binary	In years	Elementary school, VMBO, Havo/VWO/Gymnasium, MBO, HBO, University

Table 11: Unique and Shared Variances of PMH and MH on psychological metrics

	R^2	% Total
Self-esteem		
Unique PMH	0.004	1.28
Unique MH	0.275	81.29
Shared	0.059	17.43
Total	0.338	100.00
Loneliness		
Unique PMH	0.008	18.72
Unique MH	0.020	49.99
Shared	0.013	31.29
Total	0.041	100.00
Neuroticism		
Unique PMH	0.020	5.12
Unique MH	0.282	72.56
Shared	0.087	22.31
Total	0.388	100.00