Are Important Attitudes More Stable? No, Not Really

Thomas J. Leeper

June 27, 2014

Abstract

In research on attitudes, strong attitudes are typically thought to be more persistent (i.e., stable over time) than weaker attitudes. Indeed strong attitudes are often defined as those that are stable. Surprisingly, this assumed strength–stability linkage has faced little empirical scrutiny and been taken for given in much published research. Are attitudes felt to be stronger, as measured by subjective attitude importance, more stable over time? Through six studies, this paper uses two- and five-wave panel survey data to show that while attitude importance may influence over-time attitude dynamics, personally important and personally unimportant attitudes are similarly stable over time. The results have important implications for attitudes research and call into question the very definition of attitude strength.

Keywords: attitudes, attitude importance, attitude strength, stability, persistence

One of the lasting puzzles of attitudes research is whether or not attitudes are *persistent* (i.e., stable over time). Common wisdom, reiterated in different ways various times over the last sixty years, is that stronger and more personally important attitudes are more stable than weaker attitudes and thus strong attitudes have greater and more consistent influence on behavior and cognition. Indeed, Converse (1964) described a "black-and-white" model where the American electorate was divisible into a "hard core" with "well crystallized and perfectly stable" political attitudes (242) and another segment consisting of "people who, for lack of information about a particular dimension of controversy, offer meaningless opinions that vary randomly in direction during repeated trials over time" (243).[1] The shadow of Converse's research on attitude stability carries through nearly all subsequent research on attitudes in social and political psychology. Indeed, Petty and Krosnick (1995) borrow directly from Converse to explicitly define *attitude strength* as "the extent to which attitudes manifest the qualities of durability and impactfulness" (3; see also Miller and Peterson 2004). Strong attitudes and stable attitudes are thus seen as one and the same; likewise, weak attitudes are theorized as a separate category of attitudes that vary substantially over time. Despite the ubiquity of claims that stability and importance are linked, the evidence to support these claims is surprisingly sparse. Aside from the repeated reference to greater stability of strong attitudes in the literature, little research has actually shown strength of any kind to be associated with stability, or even investigated the question.[2]

How convincing is the evidence that 'stronger' attitudes are actually more stable than 'weaker' attitudes? The difficulties in answering this question are multiple. First, if we accept the consensus definition of strong attitudes as stable, what are strong attitudes but those that are stable? In short, we beg the question. Second, strength may be operationalized in any of a number of ways falling broadly into categories of "structural" or "experiential" measures (Eagly and

[1] Of course, Converse concedes that his model makes no predictions about the relative proportions of these groups and also allows for small "third force" who genuinely change their views (244). And, surprisingly the model is influential despite Converse (1964)'s claim that the differences in stability between those with strong and weak attitudes "cannot be subjected to any unequivocal mathematic test" (244), leaving no empirical basis — at least in Converse's own work — for linking stability to the strength of citizens' convictions.

[2] The lack of evidence for a widely cited claim about fundamental psychology echoes the longstanding belief in the mid 20th Century that attitudes directly explained behavior despite a lack of evidence to that effect (Wicker, 1969; Festinger, 1964).

Chaiken, 1998, 287). Finally, theory aside, few empirical data exist to test any hypotheses regarding attitude strength (Krosnick, Abadie, and Abelson, 1992). To overcome these challenges, the present research focuses on the relationship between stability and attitude importance, one well-studied, experiential measure of attitude strength. Importance is defined by the "concern, caring, or significance" one attaches to an attitude (Krosnick, 1988) and it has been shown to have both cognitive and behavioral consequences (Visser, Krosnick, and Simmons, 2003; Visser, Bizer, and Krosnick, 2006; Eaton and Visser, 2008). A focus on importance breaks the conceptual tautology of strong attitudes being stable, thus enabling an empirical test of the presumed strength–stability linkage. While a small literature has examined relationships between attitude stability and attitude importance, the results are inconclusive (see Schuman and Presser, 1981; Krosnick, 1988; Bassili, 1996; Prislin, 1996).

In the face of a paucity of evidence, this paper examines the stability of important and unimportant attitudes over time. Six studies test for the relationship between importance and over-time stability across a range of variations in attitude objects, broader contexts, time periods, and lags between attitude measurements. The results suggest that the strength–stability linkage is much weaker than previously thought, which has important implications for our understanding of attitude strength and over-time attitude dynamics. If putatively strong, important attitudes are no more stable than putatively weak, unimportant attitudes, the theory underlying strength-related effects of attitudes must be revisited, the definitions of attitude "change" and attitude "strength" must be clarified, and the value of stability as a metric of attitude quality interrogated anew.

A Strength–Stability Linkage?

Attitudes are typically defined as a unidimensional construct that represents one's degree of favor or disfavor toward some object (Eagly and Chaiken, 1998, 269). While early research on attitudes focused on understanding their cognitive structure and psychological functions, the emergence of evidence that attitudes only meagerly shaped cognition and behavior led to interest in dimensions of attitudes, other than their valence or extremity, that might account for differences in attitudes'

effects. Many of these dimensions have been discussed as *strength* features of attitudes (Visser, Bizer, and Krosnick, 2006). The extant literature points to numerous attitude features that might be called "attitude strength," including attitude accessibility, knowledge, belief centrality, ambivalence, certainty, and importance (see, for reviews, Raden, 1985; Krosnick et al., 1993; Bassili, 1996; Eagly and Chaiken, 1998). Reviews of the literature on attitudes and attitude strength have made clear that intuitions about a linkage between strong attitudes and attitude stability are widely believed among social psychologists:

- "important attitudes are unusually resistant to change [. . .] and stable over time" (Boninger, Krosnick, and Berent, 1995, 61)
- "Strong attitudes [are] those that lead to selective cognitive processing, that are resistant to change, persistent over time, and predictive of behavior" (Pomerantz, Chaiken, and Tordesillas, 1995, 408)
- "strong attitudes have been found to be more resistant to social influence [. . .], more stable [. . .], and more prone to biasing influences on perception and on evaluation of attitudinal information" (Bassili, 1996, 638)
- "strong attitudes [. . .] are resistant to change, persistent over time, and predictive of behavior" (Eagly and Chaiken, 1998, 287)
- "many variables [are] thought to make attitudes strong (i.e., persist over time, resist counterpersuasion, and have an impact on judgments and behavior)" (Petty, Wegener, and Fabrigar, 1997, 611)
- "Strong attitudes [. . .] are said to be relatively stable over time, to be resistant to persuasion, and to predict manifest behavior" (Ajzen, 2001, 37)
- "Strong attitudes are persistent over time, resistant to change, and influential on thought and action" (Bizer and Krosnick, 2001, 566)
- "The more importance a person attaches to an object and the more knowledge she or he has, the more likely the attitude is to be resistant to change, persistent over time, and influential in directing thinking and action" (Holbrook et al., 2005, 750)
- "Strong attitudes remained stable irrespective of the behavior exhibited between two attitude assessments, whereas weak attitudes were significantly affected by behavior" (Crano and Prislin, 2006, 360)
- "strong attitudes are those that resist change in the face of attack, persist over long spans of time, and exert a pronounced impact on thought and behavior, whereas weak attitudes exhibit none of these characteristics" (Eaton and Visser, 2008, 1719–20)

Despite the apparently uncontroversial status of the strength–stability linkage within psychological

literature, the claimed relationship emerged surprisingly recently. Reviews of the attitude literature from the 1980s and 1990s made hardly any mention of strength or crystallization despite Converse's use of the term years earlier (see, for example, Cialdini, Petty, and Cacioppo, 1981; Cooper and Croyle, 1984; Chaiken and Stangor, 1987; Tesser and Shaffer, 1990; Olson and Zanna, 1993) except in discussions of the resistance to persuasion literature (see, for a classic review, McGuire, 1969).

What strength-related attitude characteristics are worth considering as candidate explanations for attitude stability? As already noted, there are numerous strength-related characteristics of attitudes. Among the most commonly examined are *attitude importance* and *attitude certainty*.[3] Attitude importance refers to "an individual's subjective sense of the concern, caring, and significance he or she attaches to an attitude" (Boninger, Krosnick, and Berent, 1995, 62) and is typically understood to derive from self-interest, value relevance, and social identification factors related to an attitude (Boninger, Krosnick, and Berent, 1995). Important attitudes are those that matter for one's self-concept. The definition of attitude certainty is somewhat more obvious. According to Alvarez and Franklin (1994), "[u]ncertainty, as we approach it, is inherently subjective. A citizen is uncertain if he or she feels uncertain" (672; see also Alvarez 1999). In this way, both importance and certainty are "meta-attitudinal" (Miller and Peterson, 2004) or "experiential" (Eagly and Chaiken, 1998) measures of strength that are conceptualized and operationalized by individuals' perceptions of their own attitudes.[4] Attitude importance is a particularly important candidate explanation for the persistence or stability of attitudes over time. Krosnick (1989) writes that "important attitudes are those that individuals attach personal importance to and care deeply about" (297), precisely the kinds of psychological representations that seem likely to persist over-time (the *attitude importance hypothesis*). We might also expect other strength-related characteristics

[3] Another common measure of attitude strength is attitude accessibility, which is generally understood as the speed with which an attitude can be retrieved from memory. Because this dimension has been shown to result from other strength-related characteristics (Krosnick, 1989) and is not commonly available in public attitude surveys, I ignore it here.

[4] Previous studies have shown that importance and certainty are distinct types of attitude strength (Krosnick et al., 1993; Visser, Bizer, and Krosnick, 2006) and that importance and certainty have distinct origins and consequences for behavior and cognition (Boninger, Krosnick, and Berent, 1995; Visser, Krosnick, and Simmons, 2003). Yet, none of these studies examine the strength–stability linkage with strength operationalized as either importance or certainty.

of attitudes, including attitude certainty, to be associated with stability but as the next section will reveal, a severe paucity of data prevent any test for such a relationship.

Given there is little empirical evidence of a strength–stability linkage, why should we expect one to exist? Krosnick (1988) points to several reasons: (1) the greater cognitive interconnections between important attitudes and associated values (see, for example, Festinger, 1957; Converse, 1970), (2) important attitudes have greater stores of attitude-relevant knowledge (see, for example, Holbrook et al., 2005), (3) individuals create homogeneous social networks that reinforce their important attitudes, and (4) individuals are more likely to make public commitments to important attitudes (240–41). Relatedly, one could imagine that higher importance attitudes are associated with greater cognitive elaboration: when prompted to consider a particular object, if attitude objects of greater importance yield deeper and more thorough retrieval of object-relevant beliefs from memory, yielding a more stable attitude response over-time than the shallow and perhaps heuristic retrieval expected for less important attitudes (Chaiken, Liberman, and Eagly, 1989). A further possibility is that important and unimportant attitudes (or strong and weak attitudes, in general) are associated with different forms of initial information processing. Evidence suggests that individuals who process information in an "online" fashion (generating a "hot," running tally evaluation of objects) hold stronger attitudes than those who process information in a "memory-based" fashion (storing attitude-relevant considerations in memory without evaluating them) (Hastie and Park, 1986; Lodge, Steenbergen, and Brau, 1995; Druckman and Leeper, 2012). Thus there are a multitude of theoretical reasons to support the strength–stability linkage, many of which point to attitude importance as a uniquely relevant candidate explanation for over-time persistence of attitudes.

How large is the empirical body of evidence that supports the claimed strength–stability linkage? Schuman and Presser (1981), in their landmark study of survey question wording write that:

> on the whole one expects attitude strength (as measured through self-report) and attitude-crystallization as operationalized by over-time reliability) to be highly correlated. The expectation is so reasonable that one might think it already well documented, but in fact

> we have not located any demonstration using data on the general population (253)

They then examine over-time stability using one attitude item about crime from a University of Michigan survey and one attitude item about abortion from a three-wave General Social Survey panel. They identified higher levels of stability among those for whom the issues are of higher importance, but the effects are relatively small. Research by Krosnick (1988) compares the stability of responses to several opinion items stratified by the importance individuals place on each issue. He, too, finds that high importance attitudes are slightly more stable over-time. Krosnick (1991) offered some further evidence for variation in the stability of attitude-like constructs,[5] showing that "On average, Americans' policy preferences appear to be no less crystallized than their identifications with political parties, their ideological orientations, their attitudes toward social groups, and their feelings of political efficacy and trust" and that all of these constructs were highly stable (570). The study does not explicitly test for a strength–stability linkage, however. Another small study examined the strength–stability linkage, but it assumes (in its opening sentence) that "strong attitudes are stable over time" (Prislin, 1996, 447).[6] From three student samples, the study finds that correlations between political attitudes at two interviews two-to-three weeks apart were higher among those with higher attitude strength, as measured by a multi-item scale combining several strength-related characteristics. Finally, Bassili (1996) (Study 2) examines stability over a ten-day period on respondents' attitude toward pornography and finds no effect of importance (647).

Rather quickly then, the stability-inducing effect of importance was grouped with other effects for which there is much greater empirical basis (resistance to influence, impact on information processing, and links to behavior). Only four empirical studies explicitly test for this relationship and the results are quite mixed: substantively small and borderline statistically significant differences in stability were found. The results are inconsistent with Converse's "black-and-white"

[5]This temporarily linked the attitude stability literature with a parallel literature in political psychology that examined Converse's finding of high levels of stability in political party self-identification (see, for example, Dreyer, 1973; Jennings and Niemi, 1975; Abramson, 1976; Franklin and Jackson, 1983; Brody and Rothenberg, 1988; Martinez and Gant, 1990; Green and Palmquist, 1994; Lavine, Johnston, and Steenbergen, 2013).

[6]In somewhat related work Pelham (1991) finds, from a small student sample, that measures of self-concept held with certainty are more stable than those held with lower certainty but finds that self-views do not differ according to perceived importance.

distinction between the stability of strong and weak attitudes. If we are to continue to believe in a strength–stability linkage, we need more evidence. The task is therefore to test the attitude importance hypothesis, which quite simply expects greater attitude change over-time among those with low importance attitudes than high importance attitudes.

Study 1

The hypothesized strength-stability linkage is fundamentally a descriptive rather than causal claim about attitudes. Whether stronger and weaker attitudes vary in their stability over-time is therefore best assessed using population-representative samples of subjects, lest the results be skewed by biases present in a particular student or other convenience sample (see, for example, Sears, 1986). Testing this hypothesis requires quite robust sources of data.[7] Despite nearly all major survey data collection efforts failing to satisfy the minimum data requirements necessary to test hypotheses about the strength-related differences in attitude stability, five publicly available datasets exist to test the hypothesized strength–stability linkage. The author additionally adds a novel survey-experimental dataset to this collection. No other data exist (to the author's knowledge) that allow for a test of differences in stability across any other strength-related attitude characteristic. All

[7] Specifically, in order to test hypotheses about variations in attitude stability over-time, an individual-level dataset must pass several sequential hurdles. First, any dataset must involve measurement of attitudes. While a seemingly low threshold, this criterion rules out the large number of surveys on non-attitudinal topics and most campaign polling, which measures only candidate choice(s) or party preferences, as well as economic and consumer surveys about finances or purchasing behavior. Second, any dataset must be an individual-level panel, as opposed to some kind of repeated cross-sectional survey. This rules out most major survey data collection efforts, such as the General Social Survey, the European Social Survey, the World Values Survey, most proprietary surveying (e.g., by Gallup or Pew), the YouGov Cooperative Campaign Analysis Project, the Cooperative Congressional Election Study (Vavreck and Rivers, 2008), the five-year British Election Study Continuous Monitoring Survey, the multi-wave ANES 2010–2012 Evaluations of Government and Society, and so forth, all of which are repeated cross-sectional designs. Third, any dataset must ask the same questions two or more times on the same respondents. This criterion eliminates, for example, most of the ANES Time Series studies and the Comparative Study of Electoral Systems surveys, which frequently involve repeated interviewing but generally do not ask respondents the same attitude questions across multiple waves, and the American Panel Survey (`http://taps.wustl.edu/`), which repeatedly measures ideology but not issue opinions. Finally, the most significant criterion is the requirement that any dataset sufficient to test these hypotheses must measure attitude strength (or a construct very similar to it). This further eliminates some potentially useful panel surveys, such as all remaining ANES panels except 1980, 1984, and 2008, the 12-wave Danish Power Study (see Togeby et al., 2004), the Jennings–Niemi Political Socialization study (see, for example, Jennings and Niemi, 1975; Jennings and Markus, 1984), the Dutch Longitudinal Internet Studies for the Social Sciences (LISS) (Scherpenzeel and Das, 2010), the University of Gothenburg's Citizen Panel (`http://www.lore.gu.se/surveys/citizen/`), and the University of Bergen's Citizen Panel (`http://www.uib.no/medborger`).

of the studies examine political attitudes for reasons of data availability. While this narrows the empirical basis of assessing the attitude importance hypothesis, it also enables a test of stability across attitudes that vary widely in their importance across the population.

With these data in-hand, the attitude importance hypothesis can be tested by comparing the amount of change between attitude measurements, across levels of importance. Figure 1 shows the expected inverse relationship between strength and amount of attitude change between interviews. As importance increases, the average absolute difference between measurements of an attitude at two points in time should decrease, suggesting that attitudes are more stable when they are more important.[8] The advantage of comparing mean absolute changes is that they produce a meaningful effect size on the scale of the attitude measures: a difference in stability between strong and weak attitudes can be measured in terms of points on the response scale. Differences in absolute attitude changes across levels of importance are thus easily estimated both visually (using simple two-way plots in the style of Figure 1) and in ordinary least squares (OLS) regressions of individual-level changes on attitude importance.[9]

Figure 1 Here

Data and Methods

Data for Study 1 are drawn from the 1984 American National Election Study Time Series panel (n=2,257), which were originally used by Krosnick (1988). These data contain two attitude mea-

[8] A different way of assessing strength-related differences in stability would be to compare the test-retest correlation of strong attitudes to the test-retest correlation of weak attitudes in terms of a difference-in-correlations. Unfortunately, the difference-in-correlations approach, by contrast, produces an effect size measure that does not intuitively translate into the scale of the operational attitude measure. Similarly, comparing the difference-in-correlations between strong and weak attitudes requires dichotomizing (and thus discarding information about) any measure of attitude strength, which is typically measured as an ordinal or continuous variable.

[9] This differs from the approached used in Krosnick, which relied on a structural equation modeling (SEM) approach. As stated, simple comparisons of absolute attitude changes provide a more intuitive measure through which to assess the strength–stability linkage. By contrast, SEM estimates require both strong parametric assumptions in order to estimate the effect of strength and yield only a difference in correlations, which says little about the absolute size of the difference in attitude changes between those with strong and weak attitudes. While the choice of OLS assumes a constant linear relationship between importance and the size of attitude changes, it also requires fewer statistical assumptions than other modeling approaches. Descriptive data (available from the author), indicate that there is little reason to prefer a non-linear function form for the regression models.

sures — a standard ANES measure of attitude toward government spending and an evaluation of government provided jobs (see Appendix A) — measured at two points in time (before and after the 1984 US Presidential election). Attitudes are scaled from -1 to 1 and importance is scaled from 0 to 1. Mean attitude importance for the spending issue was 0.62 (SD=0.27) and 0.58 (SD=0.28) on the government jobs item.

The effect of importance should manifest in smaller absolute attitude changes between panel waves among those with stronger attitudes. This effect is tested by estimating an ordinary least squares regression of absolute attitude changes on attitude importance, t_1 attitude extremity,[10] importance, and control variables.[11]

Results

Figure 2 Here

On the spending issue, mean attitude change among those in the lowest category of importance was 0.50 (SD=0.37) and 0.37 (0.42) among those in the highest category. Comparable values for attitudes toward government jobs were 0.39 (0.37) and 0.49 (0.50). There is considerable individual-level variation in attitude stability but absolute levels of stability are comparable across levels of importance. More formally, ordinary least squares regression coefficients for importance (and associated standard errors and p-values) were: 0.03 (0.05, $p <= 0.49$) for government spending and 0.12 (0.05, $p <= 0.02$) for government jobs. Figure 2 displays these results graphically as fitted values from the regression. The white lines represent the fitted values across levels of importance, the gray polygons represent the associated confidence regions, and the black line is the average of the two fitted lines. As is visually clear, for one issue there is no effect and for the other, the result is in the opposite direction expected by the attitude importance hypothesis.

[10] Including attitude extremity controls for the fact that more extreme attitudes are able to move more scale points between waves than middle-category responses. For an attitude expressed as 4 on a 1 to 7 scale, the maximum possible change is 3 points whereas an attitude expressed at 1 or 7 has a maximum possible change of 6 points.

[11] Control variables were gender, age, race, hispanic ethnicity, household size, education, political interest, and interviewer rating of subject's knowledge of politics.

Study 2

Study 1 reanalyzed data from one of the two studies by Krosnick (1988) and found no support for the attitude importance hypothesis. Study 2 repeats this re-analysis for Krosnick's second study from the same article.

Data and Methods

Data for Study 2 are drawn from the 1980 ANES "Combined Panel" (n=3,587). The dataset contains measures of attitudes on four issues — government spending, inflation, defense, and Russia — with associated attitude importance measures asked at three panel waves (see Appendix A for additional details and exact question wordings). Due to substantial data missingness in Wave 2, the analysis here focuses on Waves 1 and 3. Attitudes are scaled from -1 to 1 and importance (from the first wave) is coded to scale from 0 to 1.[12] Mean importance on the four issues was on average high. For government spending: 0.79 (SD=0.19); for inflation: 0.77 (0.20); for defense: 0.81 (0.18); and for Russia: 0.78 (0.20).

Results

For government spending attitudes, among those in the lowest quartile of importance, mean absolute attitude change was 0.16 (SD=0.32), while among those in the highest quartile of importance, mean absolute change was 0.11 (SD=0.30). Comparable numbers for the other issues were: inflation: 0.10 (SD=0.28) versus 0.13 (0.36); for defense: 0.12 (0.26) versus 0.10 (0.29); and for Russia:0.17 (0.34) versus 0.19 (0.41). More formally, ordinary least squares regression coefficients for importance, with associated standard errors and p-values, are for government spending: β = -0.14 (SE=0.05, $p <= 0.00$); for inflation: -0.05 (0.05, $p <= 0.23$); for defense: -0.08 (0.05, $p <= 0.03$); and for Russia: -0.11 (0.05, $p <= 0.02$), suggesting small negative relationships be-

[12] Note that importance was measured using a 0–100 thermometer scale. In the original analysis by Krosnick (1988), this scale was cut at 85 to create low- and high-importance groups and most observations were discarded in order to use all three waves of data. In this analysis only two waves are used and importance is used as a continuous variable.

tween importance and stability. While these effects are, in three cases, statistically distinguishable from zero, the absolute size of the strength–stability linkage for these attitudes is small.

Figure 3 Here

Figure 3 shows the predicted absolute attitude changes from these regressions as a series of lines with corresponding confidence intervals. Specifically, the plot shows white lines representing the fitted regression lines for amount of attitude change for each attitude, using a gray polygon to represent the confidence region for those fitted values, and a black line is drawn to represent the average predicted value at each level of importance. What should be immediately clear in the plot is that the size of attitude changes (which can range from 0 to 2) are quite small overall and the amount of attitude change varies only minimally across levels of importance. Thus while the regressions indicate statistically detectable support for the attitude importance hypothesis, the size of these effects is small. Indeed, absolute attitude change at any level of importance is less than a single point on the response scale of the questions. While higher importance individuals are expected to change their attitudes somewhat less, this effect is sufficiently small that it would be imperceptible using seven-point response scales.

Study 3

Studies 1 and 2 reanalyzed available data previously used to test the strength–stability linkage. The results show that while those data have previously been used to support the attitude importance hypothesis, the results are (in substantive terms) strikingly small. Rather than "black-and-white" differences in stability, important and unimportant attitudes were quite similarly stable. And in the case of Study 1, the results are statistically null. A potential shortcoming of those data are that they examine relatively few attitudes and all attitudes were measured in a single political context (the period 1980–1984). Study 3 therefore tests the attitude importance hypothesis in a contemporary context (2008–2009) with a larger number of attitudes, many of which tap evaluations of higher-profile political issues including immigration, terrorism, and healthcare.

Data and Methods

Table 1 Here

Data come from the ANES 2008–2009 Online Panel (n=1,607), which measured attitudes toward eight policy issues (exact question wordings are included in Appendix A) at two points in time prior to the 2008 US Presidential election. Attitudes were coded from -1 to 1 and importance was calculated as an average of t_1 and t_2 importance ratings and coded from 0 to 1. Importance varied across issues, with the lowest mean importance rating on the issue of banning same-sex marriage (mean=0.48, SD=0.35) and the highest on attitudes about government-provided health-care (mean=0.70, SD=0.26). Means for all issues are shown in Table 1, column 1. Note that this panel also measured the standard ANES government spending question (as in Studies 1 and 2) at two additional waves separate from the eight attitude questions analyzed here. The results for this question are consistent with those found in this study (and are reported at the bottom of Table 1).

Results

Figure 4 Here

The results are clear. As importance increases, individuals' are found to have somewhat lower absolute attitude changes between t_1 and t_2. However, the size of this effect is small and does not reach conventional levels of statistical significance on five of nine issues. Ordinary least squares regression coefficients for importance are shown in Table 1, column 2. To see these relationships more clearly in substantive terms, Figure 4 shows predicted absolute attitude changes across levels of attitude importance for each issue.[13] The thick black line indicates the averaged fitted values across all issues. At the lowest level of importance, the average expected change in attitudes across all issues is 0.49. This translates substantively to a change of between one and two scale points (on a seven-point attitude scale). At the highest level of importance, the average expected

[13]The results are, again, based on regressions of t_2 attitude on the extremity of t_1 attitude, importance, and a variety of demographics measures.

change in attitudes is 0.28. This translates to just shy of one scale point. In other words, the effect of importance appears to be a difference in attitude changes of about one-half of one response scale point, which means the effect would be essentially undetectable. Importantly the wide 95%-confidence regions on the individual regression results are entirely consistent with there being no effect of importance or even an effect whereby more important attitudes are less stable.

Discussion of Studies 1–3

Studies 1–3 tested the attitude importance hypothesis by examining attitude stability at two points in time. Study 1 data were collected immediately before and immediately after the 1984 US Presidential election. Study 2 data were collected in January and September prior to the 1980 US Presidential election. The time waves and broader political context, which might produce attitude changes, perhaps differentially across levels of attitude importance, differ between the studies. Similarly, Study 3 data were collected in January and October, prior to the 2008 US Presidential election, thus replicating the time lag between interviews and political context analyzed in Study 2, while broadening the set of attitudes measured. In all cases, the largest effects seen were in Study 3 and even these translated into substantive effect sizes whereby important attitudes moved about one-half scale point less than completely unimportant attitudes. That all three studies, despite these various differences and similarities, point consistently to a small or perhaps nonexistent strength–stability linkage is analytically encouraging from the perspective of replication even if disappointing for the attitude importance hypothesis.

Study 4

Studies 1–3 used two waves of measurement to assess stability and may therefore be biased toward finding no differences in attitude stability because there is insufficient time for variations to manifest and any variations might be clouded out by random variation in the measure of the attitudes. Studies 4–5 therefore analyze attitude stability across five points in time in order to detect the

strength–stability linkage manifests as lower over-time variance in attitudes for high importance attitudes. Study 4 additionally uses a multi-item measure of attitude to alleviate any concern that measurement error clouds the relationship between importance and stability (see Ansolabehere, Rodden, and Snyder, 2008).

Data and Methods

Study 5 relies on data from a five-wave component of the ANES 2008–2009 Online Panel (n=3,039), which included measures in February, June, September, October, and November 2008 of respondents' attitude toward the number of U.S. troops stationed in Iraq. Unlike in Studies 1–3, these data provide an additional advantage in that they offer multiple (two) measures of attitude at each point in time: one measuring the respondent's preferred change in the number of troops and one measuring support for a withdrawal of troops from Iraq (see Appendix A). These questions therefore allow for an analysis of averaged attitude items at each wave and therefore reduce concerns that the results are due to measurement error. As in the previous studies, attitudes on both questions were scaled from -1 to 1 and a combined attitude item was created by averaging the two questions separately at each wave. Correlations between the two attitude items at each of the five interviews were: 0.63, 0.58, 0.50, 0.54, and 0.47, respectively. Attitude importance was averaged across items and across waves, then coded to range from 0 to 1.[14] Mean importance was 0.62 (SD=0.22) on the combined measure.

As in Studies 1–3, it is possible to test for an effect of importance, by regressing absolute attitude changes on t_1 attitude extremity, importance, and control variables. Because these data additionally include measurement of attitudes from five interviews, it is also possible to examine the effect of importance on stability in terms of the individual-level variance of attitude responses across time. If importance is associated with greater stability, then the variance of a given individual's attitude responses over the five waves should be large if they attach low importance to that issue and this variance should decrease as importance increases. Regressing these individual-level

[14]Importance was measured separately for the two items in all waves except Wave 2 and combined importance rating was created by averaging the two measures.

variances on importance and the same set of controls used in the previous analysis, it is possible to detect any differences in variances attributable to importance.

Results

Figure 5 Here

As in Studies 1–3, we can look for the effect of importance in the absolute attitude changes between panel waves. Figure 5 shows predicted values from a regression of absolute attitude changes between t_1 and each subsequent panel wave, across levels of attitude importance. Four white lines are shown (with associated confidence regions in gray), which represent the change from the first wave to each of the subsequent four panel waves. In each case the expected absolute change in attitude between waves does not vary across importance, a fact clearly visible in the overlapping lines and the horizontal black line that averages the fitted values.

Figure 6 Here

Next, individual-level, over-time variances in attitudes were examined. The mean individual-level attitude variance is 0.06 (SD=0.10) for those in the lowest quartile of attitude importance and 0.06 (SD=0.12) among those in the highest quartile of attitude importance. The fitted individual-level variance from regressions of attitude variances on attitude importance and a number of co-variates are shown in Figure 6. The ordinary least squares regression coefficient for importance in this regression is -0.01 (SE=0.01, $p < 0.47$). The single white line in Figure 6 shows that there is absolutely no effect of importance on individual-level variance in attitudes. The narrow confidence band around the fitted regression line reflects the near-elimination of measurement error through the use of multiple items to measure attitude at each wave.

Study 5

Study 4 found no support for the attitude importance hypothesis using five-wave panel data, but only examined one issue. Study 5 therefore tests the attitude importance hypothesis again using

five-wave panel data, but this time on nine different attitudes.

Data and Methods

Table 2 Here

Data for Study 5 come from a panel study of the 1976 U.S. Presidential election (n=1,236) (Patterson, 2000), which included measures of attitudes on nine policy issues, measured in each of five panel waves (in February, April, June, August, and October 1976). The measures stated two policy alternatives on a single dimension and asked respondents: "Which number on the scale would best describe your feelings on this issue or haven't you thought much about it?" All questions were asked on seven-point scales, with named endpoints (specific to each question and consistent with the semantic differential structure of the questions). The exact question wordings are included in Appendix A. Attitudes were coded to scale from -1 to 1. Importance was averaged across panel waves and coded from 0 to 1. Importance varied widely across issues, with the highest average importance rating on the issue of jobs and the lowest on the issue of abortion (see Table 2, column 1).

Results

Figure 7 Here

We can first look at pairwise comparisons of attitudes from two different interviews. The fitted values of the regression models across levels of importance are shown in Figure 7, separately for each pairwise comparison of panel Waves 2–5 against Wave 1.[15] The white lines are the fitted regression lines for each issue across levels of attitude importance and the black line represents the average of those lines. There seems to be little consistent tendency for smaller changes at higher levels of importance and yet the results also suggest even less substantial differences in stability across levels of importance than seen in the previous studies.

[15]Given the large amount of data, it is difficult to plot all pairwise comparisons of panel waves. With eight policy issues and five waves, the number of pairwise plots is $9 * \binom{5}{2} = 90$.

Figure 8 Here

Next, turning to the analysis of individual-level variances, ordinary least squares coefficients (with individual-level variances as the dependent variable), and associated standard errors and p-values, are shown in Table 2, column 2. Only on the issue of foreign intervention is there an effect of importance statistically distinguishable from zero and this effect is tiny. These results are further summarized in Figure 8, which shows the predicted individual-level attitude variance across levels of importance. Each white line represents a single issue attitude and the black line averages the fitted lines. As is immediately clear, individual level variances are quite low and the expected variance of attitudes does not vary hardly at all across importance.

Discussion of Studies 4 and 5

Studies 1–3 found little evidence of a strength–stability linkage and the evidence that was found was substantively small on only a few attitudes. A concern was that these studies failed to detect differences in stability because the effect was clouded by measurement error, the possibly short time lags between interviews, and the weakness of having only two interviews per respondent. Studies 4 and 5 therefore used five-wave panel data to test the attitude importance hypothesis. Study 4 used a two-item measure of attitude and found no relationship between importance and stability. Study 5 replicated these results in an earlier context on nine attitudes and again found no relationship between importance and attitude stability on eight of nine attitudes.

Study 6

One possible explanation for the lack of evidence for a strength–stability linkage found in Studies 1–5 is about the psychological mechanism by which importance might yield more stable attitudes. Specifically, attitude importance might produce stability by encouraging individuals with high attitude importance to engage in selective exposure to attitude-congruent information (see,

for example, Holbrook et al., 2005; Brannon, Tagler, and Eagly, 2007; Leeper, 2014). As such, it is possible that attitudes will remain more stable over time if individuals are able to expose themselves to attitude-relevant information. Study 6 tests this possible mechanism.

Data and Methods

An experiment was administered to the second wave of a nationally representative panel survey of US adults (n=879). In the first wave (in Summer 2010), attitude toward an energy policy issue was measured. In the second wave eight months later (in Spring 2011), respondents were randomly assigned to one of six treatment conditions as part of a 3-x-2 factorial design or to a control group.

Those in the control group simply supplied their attitude on the issue, scaled -1 to 1, and indicated the importance of their attitude, which was then coded 0 to 1 (see Appendix for exact question wordings). The first experimental factor manipulated whether individuals received information supportive of the energy policy, opposed to the energy policy, or the opportunity to choose between the two (a selective exposure condition). The second factor was a manipulation of high or low self-interest (see Appendix for treatment wording). Because attitude importance is related to selective exposure, a manipulation of self-interest (which is one component of attitude importance (see Boninger, Krosnick, and Berent, 1995)) encourages selective exposure among those in the high self-interest condition while discouraging it in the low self-interest condition. Essentially, the self-interest manipulation attempts to influence the proposed mediator that links importance to stability (Bullock, Green, and Ha, 2010; Imai et al., 2011).[16] Thus it is possible to compare attitude stability under no manipulation (the control group), to stability under exposure to supportive and oppositional persuasive appeals (under both high and low self-interest), to stability under selective exposure (under both high and low self-interest). The effect of importance on stability is assessed by an ordinary least squares regression of absolute $t2-t1$ attitude changes on indicators for each experimental condition, measured attitude importance, and treatment-importance interactions.

[16]To confirm that selective exposure was indeed manipulated, the odds of choosing the attitude-congruent message was assessed. In the high self-interest condition, the odds were 7.1 versus 1.67 in the low self-interest condition. This translates to an odds-ratio of 4.25, with a 95% confidence interval from 2.68 to 6.75. Attitude-congruent selective was much higher in the high self-interest condition than the low self-interest condition.

Results

Figure 9 Here

In the control group, importance has no effect (coef. = 0.08, SE=0.13). Importance has no statistically significant relationship with stability in any of the other conditions, except in the high self-interest selective exposure condition. The coefficient on attitude importance was -0.33 (SE=0.14, $p < 0.05$), indicating that important attitudes moved about one response scale point less than low importance attitudes when individuals were encouraged to expose themselves to attitude-congruent information. Figure 9 shows the fitted absolute attitude changes across levels of importance, separately for each condition. The solid black line averages these fitted values. As is clear, the trend in all conditions is for smaller changes in high importance attitudes but these differences due to importance are not distinguishable from no effect. Indeed, even in the sole experimental condition were a significant relationship between importance and stability is found, the confidence intervals for this effect broadly overlap those of the other conditions suggesting that the identified effect is barely distinguishable from there being no strength–stability linkage.

Discussion of Study 6

Study 6 suggests that under most conditions of discouraged, allowed, and encouraged selective exposure there is little evidence to support the attitude importance hypothesis. That said, (manipulated) attitude importance did increase attitude-congruent selectivity, and in that condition alone, there was a relationship between importance and stability. So, while importance does not in general seem to be associated with stability, there may be a small strength–stability linkage when individuals engage in a high degree of attitude-congruent selective exposure. Indeed, the effect found in the high self-interest, selective exposure condition was consistent with the largest effects seen in Study 3. However, given that the general finding from Studies 1–5 was that there was a weak or no relationship between importance and stability despite presumably ample real-world

opportunities for selective exposure, there is reason to be skeptical that attitude stability varies dramatically across levels of importance in general, naturalistic, real-world settings. The results from Study 6 highlight precisely the narrow conditions under which the strength–stability linkage actually emerges.

General Discussion

It has become a truism that *stronger* attitudes are more stable than *weaker* attitudes, with the self-perceived importance of an attitude often used to conceptualize strength. Despite the theoretical prominence of attitude stability and the frequently cited linkage between strength (generally, or importance specifically) and stability, there is surprisingly little evidence for that linkage. Indeed, the attitudes literature appears to have conflated over-time attitude stability (for which there is little evidence) with resistance to persuasion (for which there are multiple decades worth of research; e.g., Petty and Krosnick 1995; Pomerantz, Chaiken, and Tordesillas 1995; Zuwerink and Devine 1996; Lavine et al. 1998). Over-time stability implies low or zero variation in repeated expressions, regardless of stimuli, while resistance is about the behavior of attitudes in the face of counterarguments. The evidence from the persuasion literature may explain, by way of conceptual stretching, the largely unsubstantiated claim of a strength–stability linkage. The strength–stability linkage is about the very nature of attitudes rather than their behavior under the threat of persuasion.

This paper therefore provides a true test for a strength–stability linkage, uses population-representative samples of data, and analyzes more data on the question than any previous research. The results show that attitudes deemed subjectively important are not substantially more stable than those deemed unimportant. While such a strength–stability linkage may exist, the empirical evidence shown here is that such an effect is likely small (i.e., completely unimportant attitudes fluctuate more than extremely important attitudes by an amount possibly observable as one response category on a seven-point attitude scale) or to not exist at all. Indeed, the difference in the stability of important and unimportant attitudes is almost entirely lost in the noise of random mea-

surement uncertainty. None of the evidence here is consistent with "black-and-white" differences in stability between strong and weak attitudes.

These results have important implications for understanding opinions and public opinion in democratic politics as well as for the study of attitudes, attitude strength, and the bodies of literature which rely on attitude strength as explanation, such as literature on information processing, motivated cognition, persuasion, and attitude-behavior linkages.

Implications for Democratic Politics

Over-time stability is often discussed as an important criterion of the quality of political opinions and, indeed, of citizens. For example, when *The People's Choice* (Lazarsfeld, Berelson, and Gaudet, 1948) reporting disappointing results of media on the development of attitudes over-time, opinion stability and change emerged as key normative puzzles regarding the quality of democracy and citizenship. The same authors later wrote:

> What of flexibility? Curiously, the voters least admirable when measured against the individual requirements contribute most when measured against the aggregate requirement for flexibility. For those who change political preferences most readily are those, who are least interested who are subject to conflicting social pressures, who have inconsistent beliefs and erratic voting histories. Without them—if the decision were left only to the deeply concerned, well-integrated, consistently-principled ideal citizens—the political system might easily prove too rigid to adapt to changing domestic and international conditions. Berelson, Lazarsfeld, and McPhee (1954, 316)

Thus, the principled stability of political attitudes and flexibility are both seen as potential normative goods in "classical democratic theory" (Althaus, 2006). Elsewhere, Berelson (1952) made clear that stability is clearly preferred: "the electorate is required to possess a body of stable political principle or moral standards, in contrast with fluctuating impulses or whims" (Berelson, 1952, 320).

Perhaps satisfying to Berelson and others, the evidence here suggests that attitudes on political matters are quite stable. Yet this is a substantive conclusion quite different from that reported

by Converse (1964) in his landmark study of political attitudes.[17] But Converse's question was not whether opinions are stable at all, but whether — lacking ideological constraint among different attitudes — the electorate's opinions could be explained by coeval dynamics of stasis among some and randomness among the remainder (the "black-and-white" model). The present research shows attitudes to be quite stable over periods of months and, furthermore, that such stability does not differ dramatically across those with attitudes felt and reported to be of different levels of importance. A "gray" model of modest stability across all levels of importance seems to fit these data well. The strength of citizens' attitudes, at least as measured by importance, does not seem to impact the stability of those views.

This evidence raises questions about the value of both attitude importance and stability as democratic goods. Krosnick (1990) highlighted the value of importance for creating "issue publics" with passionate views about political issues; importance is a potential political mobilizer (see also Converse, 1964). So, attitude importance may have independent value as a criterion of democratic citizenship. Stability, however, is on less sturdy ground. If attitudes deemed important and unimportant have similar over-time dynamics, there is little reason to say that stronger or weaker attitudes are better because of their stability — issue publics may form because of attitude importance, but the attitudes expressed by those activists seem unlikely to persist much longer than those of the politically disengaged. If stability is a function of factors other than strength, then perhaps the tension raised by Berelson between preferring a public with both stable and response attitudes should call into question the value of stability as a normatively measure of citizenship.

Implications for Attitudes Research

The best approximation of the consensus definition of "attitude" is, according to Eagly and Chaiken (1998), that an attitude is a summary evaluation — from favor to disfavor — of a particular object. One could argue that a summary evaluation must be stable: i.e., that an attitude has a "true score"

[17] The issue of political opinion stability has received considerable debate (see Converse, 1970; Asher, 1974; Pierce and Rose, 1974; Achen, 1975; Dean and Moran, 1977; Erikson, 1978; Converse and Markus, 1979; Erikson, 1979; Taylor, 1983; Jackson, 1985; Feldman, 1989; Hill and Kriesi, 2001; Ansolabehere, Rodden, and Snyder, 2008).

(in a classical testing theory sense) that is observed with error (see, again, Achen, 1978).[18] Alternatively one could argue that an attitude is undefined over-time and only definable (and observable) at a particular moment in time (e.g., because it is an ephemeral, memory-based construction; see Zaller and Feldman 1992).[19]

A third conceptual perspective is that an attitude is not a fixed point at all (i.e. an attitude has no true score on an evaluative dimension) but instead exists as a distribution or collection of evaluative considerations in memory with some central tendency.[20] This "inclusive" view has somewhat recently been expressed by Eagly and Chaiken (2007):

> Instability of attitudes may seem to be present because people sometimes report what appear to be substantially different attitudes in new situations. Although instability could arise because of a genuine change in the inner tendency, some of this inconsistency may reflect more ephemeral contextual factors. Therefore, apparent attitude change can erode over time, resulting in a minimally changed evaluative tendency. Due to the influence of contextual cues and new information, evaluative responding to an attitude object may merely vary around an average value that reflects the inner tendency that constitutes the attitude (Eagly and Chaiken, 2007, 588).

This implies that attitudes expressed at any particular point in time, perhaps in response to a particular stimulus, might differ from previous attitude expressions while still reflecting a stable evaluative representation of an object in memory. If we conceptualize attitudes in this third way, we may be able to better understand stability. It may be that strong and weak attitudes both vary similarly

[18]The conceptualization of an attitude as a "true score" is also similar to the formal theoretical view of preferences as a single-peaked distribution of utilities surrounding an ideal point. Yet preferences and attitudes are quite different. Variations in attitudes relate to how much one favors or disfavors a given alternative, without regard to the other available alternatives. Preferences connote relationships among alternatives and thus requires the specification of a choice set. Following Bartels (2003), politics is probably best examined through the psychological lens of attitudes rather than the economic lens of preferences.

[19]Of course, stability of attitudes might be due entirely memory-based processing rather than a reliance on evaluative summaries. Bohner and Dickel (2011) write that "The assumption is that strong attitudes are more stable across situations and over time and, hence, can consistently be recalled from memory, whereas weak attitudes are less accessible and thus more susceptible to context inïňĆuences. It should be noted, however, that chronic accessibility of the information used to construct an attitude may yield the same stability in attitude judgments as may chronic accessibility of the attitude itself" (394).

[20]This view balances memory-based and online information processing theories (Hastie and Park, 1986) by acknowledging that a given expression of an attitude might deviate from a running tally evaluation (i.e., the mean of the attitude distribution) due to sampling of memory-based evaluations and contextual factors, while the distribution of evaluative tendencies from which memory-based considerations are drawn remains unchanged over-time.

in time,[21] but the evaluative responses of strong and weak attitudes differ in response to particular stimuli. For example, social judgment theory (Sherif and Hovland, 1961) describes attitude change in terms of latitudes of acceptance, rejection, and noncommitment. Perhaps strength shapes the widths of such latitudes (which can be seen in evaluative responses to persuasive stimuli) while having no appreciable effect on the stability of attitudes in the absence of stimulus. This would be consistent with extant evidence of greater resistance to persuasion for stronger attitudes and the evidence here of comparable stability of strong and weak attitudes when no stimulus is present.

Regardless of any differences between strong and weak attitudes, detecting the signal of a stable evaluative distribution, as well as detecting the deviations from that distribution's central tendency in response to particular stimuli, will require observation of considerably more draws from this evaluative distribution than is typical in attitudes research or political surveying. The practice of observing attitude stability from only two or perhaps three waves of interviews is clearly inadequate if our goal is to understand over-time dynamics or even just to understand attitudes at all. Only when we have a workable definition of attitudes and a robust measurement apparatus for understanding them (and their over-time properties) can we reasonably expect to understand attitude dynamics, including any strength–stability linkage.

Implications for Attitude Strength

A lingering question in all of this discussion is whether this research has shown anything at all or only teased out semantics in the cluttered theoretical literature on attitude strength. One could argue that all the present research shows is that attitude strength is poorly defined and operationalized. But the implications are more important. Research on attitude strength began in an effort to understand the failure of attitudes to explain differences in cognition and especially behavior. It is therefore inevitable that the literature gets caught up in tautological reasoning: attitudes that explain behavior are strong because they explain behavior. Research has teased out numerous facets of strength — both operative and meta-attitudinal concepts — all of which distinguish be-

[21] But recall that the data shown here suggest that attitudes tend to be quite stable over time.

tween attitudes that are in some respect weaker and attitudes that are in some respect strong. The present research highlights that while importance, as one of these facets, may exist and may have previously demonstrated consequences, it is not associated with stability. It may be that other strength-related attitude characteristics — such as certainty or ambivalence — do yield substantial differences in attitude stability, but given the lack of relevant data and any published studies, there is no evidence of any such relationship. In light of this, the idea of a blanket concept of "attitude strength" may be less useful than it intuitively seems, especially given the correlations between different facets of strength seem low and their consequences distinct (Visser, Krosnick, and Simmons, 2003; Visser, Bizer, and Krosnick, 2006).

Of course, the lack of a substantial strength–stability linkage found in these six studies does not necessarily mean such a relationship does not exist. The results might be constrained by the specific attitudes measured, the particular contexts in which the bulk of the attitudes were measured (the 1976–1984 and 2008–2010), or the focus on political objects of evaluations. But, the reality is that there is simply no evidence here (and therefore anywhere) to support attitude importance as an determinant of over-time stability, except under the narrow and possibly artificial condition of high degrees of selective exposure immediately prior to attitude self-report (see Study 6). If the strength–stability linkage is vital for continued theorizing about attitudes and their effects, much more empirical work must be done to identify the conditions under which differences in stability are associated with variations in attitude strength. Extant evidence documents important effects of strong attitudes, such as shaping behavior and resistance to persuasion, which means that attitude strength should remain a major topic of psychological inquiry. At this point, however, there is no reason to continue to erroneously describe strong attitudes as especially stable over time.

References

Abramson, P. R. (1976). Generational change and the decline of party identification in America: 1952-1974. *American Political Science Review*, 70(2), 469–478.

Achen, C. H. (1975). Mass political attitudes and the survey response. *American Political Science Review*, 69(4), 1218.

Achen, C. H. (1978). Measuring representation. *American Journal of Political Science*, 22(3), 475–510.

Ajzen, I. (2001). Nature and operation of attitudes. *Annual Review of Psychology*, 52, 27–58.

Althaus, S. L. (2006). False starts, dead ends, and new opportunities in public opinion research. *Critical Review*, 18(1), 75–104.

Alvarez, R. M. (1999). *Information and elections*. Ann Arbor, MI: University of Michigan Press.

Alvarez, R. M., & C. H. Franklin. (1994). Uncertainty and political perceptions. *Journal of Politics*, 56(3), 671–688.

Ansolabehere, S., J. Rodden, & J. M. J. Snyder. (2008). The strength of issues: Using multiple measures to gauge preference stability, ideological constraint, and issue voting. *American Political Science Review*, 102(02), 215–232.

Asher, H. B. (1974). Some consequences of measurement error in survey data. *American Journal of Political Science*, 18(2), 469–485.

Bartels, L. M. (2003). Democracy with attitudes. In M. B. Mackuen, & G. Rabinowitz (Eds.), *Electoral Democracy*. Ann Arbor, MI: University of Michigan Press.

Bassili, J. N. (1996). Meta-judgmental versus operative indexes of psychological attributes: The case of measures of attitude strength. *Journal of Personality and Social Psychology*, 71(4), 637–653.

Berelson, B. R. (1952). Democratic theory and public opinion. *Public Opinion Quarterly*, 16(3), 313–330.

Berelson, B. R., P. F. Lazarsfeld, & W. N. McPhee. (1954). *Voting: A study of opinion formation in a presidential campaign*. Chicago, IL: The University of Chicago Press.

Bizer, G. Y., & J. A. Krosnick. (2001). Exploring the structure of strength-related attitude features: The relation between attitude importance and attitude accessibility. *Journal of Personality and Social Psychology*, 81(4), 566–586.

Bohner, G., & N. Dickel. (2011). Attitudes and attitude change. *Annual Review of Psychology*, 62, 391–417.

Boninger, D. S., J. A. Krosnick, & M. K. Berent. (1995). Origins of attitude importance: Self-interest, social identification, and value relevance. *Journal of Personality and Social Psychology*, 68(1), 61–80.

Brannon, L. A., M. J. Tagler, & A. H. Eagly. (2007). The moderating role of attitude strength in selective exposure to information. *Journal of Experimental Social Psychology*, 43(4), 611–617.

Brody, R. A., & L. S. Rothenberg. (1988). The instability of partisanship: An analysis of the 1980 presidential election. *British Journal of Political Science*, 18(4), 445–465.

Bullock, J. G., D. P. Green, & S. E. Ha. (2010). Yes, but what's the mechanism? (don't expect an easy answer). *Journal of Personality and Social Psychology*, 98(4), 550–558.

Chaiken, S., & C. Stangor. (1987). Attitudes and attitude change. *Annual Review of Psychology*, 38, 575–630.

Chaiken, S., A. Liberman, & A. H. Eagly. (1989). Heuristic and systematic information processing within and beyond the persuasion context. In J. S. Uleman, & J. A. Bargh (Eds.), *Unintended Thought*, (pp. 212–252). New York: Guilford Press.

Cialdini, R. B., R. E. Petty, & J. T. Cacioppo. (1981). Attitude and attitude change. *Annual Review of Psychology*, 32(1), 357–404.

Converse, P. E. (1964). The nature of belief systems in mass publics. In D. Apter (Ed.), *Ideology and Discontent*, (pp. 206–261). New York: Free Press.

Converse, P. E. (1970). Attitudes and non-attitudes: Continuation of a dialogue. In E. R. Tufte (Ed.), *The Quantitative Analysis of Social Problems*, (pp. 168—-189). Reading, Massachusetts: Addison-Wesley.

Converse, P. E., & G. B. Markus. (1979). The new CPS election study panel. *American Political Science Review*, 73(1), 32–49.

Cooper, J., & R. T. Croyle. (1984). Attitudes and attitude change. *Annual Review of Psychology*, 35(1), 395–426.

Crano, W. D., & R. Prislin. (2006). Attitudes and persuasion. *Annual Review of Psychology*, 57, 345–74.

Dean, G., & T. W. Moran. (1977). Measuring mass political attitudes: Change and unreliability. *Political Methdology*, 4(4), 383–413.

Dewey, J. (1927). *Public & its problems*. Swallow Press.

Dreyer, E. C. (1973). Change and stability in party identifications. *Journal of Politics*, 35(3), 712–722.

Druckman, J. N., & T. J. Leeper. (2012). Learning more from political communication experiments: Pretreatment and its effects. *American Journal of Political Science*, 56(4), 875–896.

Eagly, A. H., & S. Chaiken. (1998). Attitude structure and function. In D. Gilbert, S. T. Fiske, & G. Lindzey (Eds.), *Handbook of Social Psychology*, (pp. 269–322). New York: McGraw-Hill.

Eagly, A. H., & S. Chaiken. (2007). The advantages of an inclusive definition of attitude. *Social Cognition*, 25(5), 582–602.

Eaton, A. A., & P. S. Visser. (2008). Attitude importance: Understanding the causes and consequences of passionately held views. *Social and Personality Psychology Compass*, 2(4), 1719–1736.

Erikson, R. S. (1978). Constituency opinion and Congressional behavior: A reexamination of the Miller-Stokes representation data. *American Journal of Political Science*, 22(3), 511–535.

Erikson, R. S. (1979). The src panel data and mass political attitudes. *British Journal of Political Science*, 9(1), 89–114.

Feldman, S. (1989). Measuring issue preferences: The problem of response instability. *Political Analysis*, 1(1), 25–60.

Festinger, L. (1957). *A theory of cognitive dissonance*. Palo Alto, CA: Stanford University Press.

Festinger, L. (1964). Behavioral support for opinion change. *Public Opinion Quarterly*, 28(3), 404.

Franklin, C. H., & J. E. Jackson. (1983). The dynamics of party identification. *American Political Science Review*, 77(4), 957–973.

Green, D. P., & B. Palmquist. (1994). How stable is party identification? *Political Science*, 16(4), 437–466.

Hastie, R., & B. Park. (1986). The relationship between memory and judgment depends on whether the judgment task is memory-based or on-line. *Psychological Review*, 93(3), 258–268.

Hill, J. L., & H. Kriesi. (2001). An extension and test of Converse's 'black-and-white' model of response stability. *American Political Science Review*, 95(2), 397–413.

Holbrook, A. L., M. K. Berent, J. A. Krosnick, P. S. Visser, & D. S. Boninger. (2005). Attitude importance and the accumulation of attitude-relevant knowledge in memory. *Journal of Personality and Social Psychology*, 88(5), 749–769.

Imai, K., L. Keele, D. Tingley, & T. Yamamoto. (2011). Unpacking the black box: Learning about causal mechanisms from experimental and observational studies. *American Political Science Review*, 105(4), 765–789.

Jackson, J. E. (1985). Preference evolution among the mass public, 1956-1964. *Political Methodology*, 11(3/4), 221–247.

Jennings, M. K., & G. B. Markus. (1984). Partisan orientations over the long haul: Results from the three-wave Political Socialization Panel Study. *American Political Science Review*, 78(4), 1000–1018.

Jennings, M. K., & R. G. Niemi. (1975). Continuity and change in political orientations: A longitudinal study of two generations. *American Political Science Review*, 69(4), 1316.

Krosnick, J. A. (1988). Attitude importance and attitude change. *Journal of Experimental Social Psychology*, 24(3), 240–255.

Krosnick, J. A. (1989). Attitude importance and attitude accessibility. *Personality and Social Psychology Bulletin*, 15(3), 297–308.

Krosnick, J. A. (1990). Government policy and citizen passion: A study of issue publics in contemporary America. *Political Behavior*, 12(1), 59–92.

Krosnick, J. A. (1991). Response strategies for coping with the cognitive demands of attitude measures in surveys. *Applied Cognitive Psychology*, 5(3), 213–236.

Krosnick, J. A., A. Abadie, & R. P. Abelson. (1992). The case for measuring attitude strength in surveys. In J. M. Tanur (Ed.), *Questions About Questions: Inquiries Into the Cognitive Bases of Surveys*, (pp. 177–202). New York: Russell Sage Foundation.

Krosnick, J. A., D. S. Boninger, Y. C. Chuang, M. K. Berent, & C. G. Camot. (1993). Attitude strength: One construct or many related constructs? *Journal of Personality and Social Psychology*, 65(6), 1132–1151.

Lavine, H., C. D. Johnston, & M. R. Steenbergen. (2013). *The ambivalent partisan*. New York: Oxford University Press.

Lavine, H., J. W. Huff, S. H. Wagner, & D. Sweeney. (1998). The moderating influence of attitude strength on the susceptibility to context effects in attitude surveys. *Journal of Personality and Social Psychology*, 75(2), 359–373.

Lazarsfeld, P. F., B. R. Berelson, & H. Gaudet. (1948). *The people's choice: How the voter makes up his mind in a presidential campaign*. New York: Columbia University Press.

Leeper, T. J. (2014). The informational basis for mass polarization. *Public Opinion Quarterly*, 78(1), 27–46.

Lippmann, W. (1928). *The phantom public*. New Brunswick, NJ: Transaction Publishers.

Lodge, M., M. R. Steenbergen, & S. Brau. (1995). The responsive voter: Campaign information and the dynamics of candidate evaluation. *American Political Science Review*, 89(2), 309–326.

Martinez, M. D., & M. M. Gant. (1990). Partisan issue preferences and partisan change. *Political Behavior*, 12(3), 243–264.

McGuire, W. J. (1969). The nature of attitudes and attitude change. *The Handbook of Social Psychology*, 3, 136–314.

Miller, J. M., & D. A. M. Peterson. (2004). Theoretical and empirical implications of attitude strength. *The Journal of Politics*, 66(03), 847–867.

Olson, J. M., & M. P. Zanna. (1993). Attitudes and attitude change. *Annual Review of Psychology*, 44, 117–154.

Patterson, T. E. (2000). "Presidential campaign impact on voters: 1976 Panel, Erie, Pennsylvania, and Los Angeles. icpsr07990-v1." Inter-university Consortium for Political and Social Research [distributor].

Pelham, B. W. (1991). On confidence and consequence: The certainty and importance of self-knowledge. *Journal of Personality and Social Psychology*, 60(4), 518–530.

Petty, R. E., & J. A. Krosnick, (Eds.). (1995). *Attitude strength: Antecedents and consequences*.

New York: Psychology Press.

Petty, R. E., D. T. Wegener, & L. R. Fabrigar. (1997). Attitudes and attitude change. *Annual Review of Psychology*, 48, 609–47.

Pierce, J. C., & D. D. Rose. (1974). Nonattitudes and American public opinion: The examination of a thesis. *American Political Science Review*, 68(2), 626–649.

Pomerantz, E. M., S. Chaiken, & R. S. Tordesillas. (1995). Attitude strength and resistance processes. *Journal of Personality and Social Psychology*, 69(3), 408—-419.

Prislin, R. (1996). Attitude stability and attitude strength: One is enough to make it stable. *European Journal of Social Psychology*, 26, 447–477.

Raden, D. (1985). Strength-related attitude dimensions. *Social Psychology Quarterly*, 48(4), 312–330.

Scherpenzeel, A., & M. Das. (2010). 'True' longitudinal and probability-based internet panels: Evidence from the Netherlands. In M. Das, P. Ester, & L. Kaczmirek (Eds.), *Social and Behavioral Research and the Internet: Advances in Applied Methods and Research Strategies*, (pp. 77–104). Boca Raton: Taylor & Francis.

Schuman, H., & S. Presser. (1981). *Questions and answers in attitude surveys: Experiments on question form, wording, and context*. Thousand Oaks, CA: SAGE Publications.

Sears, D. O. (1986). College sophomores in the laboratory: Influences of a narrow data base on social psychology's view of human nature. *Journal of Personality and Social Psychology*, 51(3), 515–530.

Sherif, M., & C. I. Hovland. (1961). *Social judgment: Assimilation and contrast effects in communication and attitude change.* Yale University Press.

Taylor, M. C. (1983). The black-and-white model of attitude stability: A latent class examination of opinion and nonopinion in the American public. *American Journal of Sociology*, 89(2), 373–401.

Tesser, A., & D. R. Shaffer. (1990). Attitudes and attitude change. *Annual Review of Psychology*, 41, 479–523.

Togeby, L., J. Goul Andersen, P. Munk Christiansen, T. B. Jørgensen, & S. Valgårda. (2004). *Magt og demokrati i danmark: Hovedresutater fra magtudredningen*. Aarhus Universitetsforlag.

Vavreck, L., & D. Rivers. (2008). The 2006 Cooperative Congressional Election Study. *Journal of Elections, Public Opinion, and Policy*, November.

Visser, P. S., G. Y. Bizer, & J. A. Krosnick. (2006). Exploring the latent structure of strength-related attitude attributes. *Advances in Experimental Social Psychology*, 38(06), 1–67.

Visser, P. S., J. A. Krosnick, & J. P. Simmons. (2003). Distinguishing the cognitive and behavioral consequences of attitude importance and certainty: A new approach to testing the common-factor hypothesis. *Journal of Experimental Social Psychology*, 39(2), 118–141.

Wicker, A. W. (1969). Attitudes versus actions: The relationship of verbal and overt behavioral

responses to attitude objects. *Journal of Social Issues*, 25(4), 41–78.

Zaller, J., & S. Feldman. (1992). A simple theory of the survey response: Answering questions versus revealing preferences. *American Journal of Political Science*, 36(3), 579–616.

Zuwerink, J. R., & P. G. Devine. (1996). Attitude importance and resistance to persuasion: It's not just the thought that counts. *Journal of Personality and Social Psychology*, 70(5), 931–944.

A Exact Question Wordings

Study 1

The ANES 1984 Time Series (pre-post) study measured two attitudes. The first is the standard ANES spending/services question, which asked: "Some people think the government should provide fewer services, even in areas such as health and education, in order to reduce spending. Suppose these people are at one end of the scale at point number 1. other people feel it is important for the government to provide many more services even if it means an increase in spending. Suppose these people are at the other end, at point 7. And, of course, some other people have attitudes somewhere in between at points 2, 3, 4, 5, or 6. Where would you place yourself on this scale, or haven't you thought much about this?" and recorded response on a five point scale. Importance was measured by asking respondents: "How important is it to you that the federal government do what you think is best on this issue of spending and services? Is it extremely important, very important, somewhat important, or not important at all to you?" and recording responses on a five-point scale.

The second question is the standard ANES "jobs and standard of living" question, which asked: "Some people feel the government in washington should see to it that every person has a job and a good standard of living. Others think the government should just let each person get ahead on his own. Where would you place yourself on this scale, or haven't you thought much about this?" Importance was measured as in the previous question.

Study 2

The ANES 1980 "Combined Panel" interviewed several different sets of respondents at multiple points in time. The survey included measurement of eight attitudes in tandem with attitude importance questions, but only five of those were measured more than once and one of the five (on abortion) used substantially different response options in the two panel waves. The remaining four questions were each measured three times for respondents in the "major panel," twice for those in the "minor panel," and once or twice for those in the standard Time-Series (pre/post) panel.

The first question was the standard ANES spending/services question, which asked: "Some people think the government should provide fewer services, even in areas such as health and education, in order to reduce spending. Other people feel it is important for the government to continue the services it now provides even if it means no reduction in spending. Where would you place yourself on this scale, or haven't you thought much about this?" and recorded responses on seven-point scale.

The second question measured attitude toward inflation and unemployment. It asked: "Some people feel the federal government should take action to reduce the inflation rate, even if it means that unemployment would go up a lot. Others feel the government should take action to reduce the rate of unemployment, even if it means that inflation would go up a lot. Where would you place yourself on this scale, or haven't you thought much about this?" Responses were recorded on a seven-point scale, with point 1 labeled "Reduce inflation even if unemployment goes up a lot" and point 7 labeled "Reduce unemployment even if inflation goes up a lot."

The third question measured attitude toward defense spending. In the first two waves, it asked: "Some people believe that we should spend much less money for defense. Suppose these

people are at one end of the scale at point number 1. Others feel that defense spending should be greatly increased. Suppose these people are at the other end, at point 7. And, of course, some other people have attitudes somewhere in between at points 2, 3, 4, 5, or 6. Where would you place yourself on this scale or haven't you thought much about this?" In the third wave, a shorter version of the question was used which read only "Some people believe that we should spend much less money for defense. Others feel that defense spending should be greatly increased. Where would you place yourself on this scale or haven't you thought much about this?" In both versions, responses were recorded on a seven-point scale from "greatly decrease defense spending" to "greatly increase defense spending."

The fourth question measured attitude regarding U.S. policies toward Russia, which asked "Some people feel it is important for us to try very hard to get along with Russia. Others feel it is a big mistake to try too hard to get along with Russia. Where would you place yourself on this scale, or haven't you thought much about this?" Responses were recorded on a seven-point scale, with point 1 labeled "Important to try very hard to get along with Russia" and point 7 labeled "Big mistake to try too hard to get along with Russia."

Each question was followed by questions asking the respondent to place the government's current policy on the same scale. Thereafter, importance was measured on a 0 to 100 thermometer scale in response to a question phrased as follows: "You placed yourself at point [number] and what the government is doing at point [number]. [...] How important is it to you that the government [continue/change] what it is doing so that it [stays close/comes closer] to your own position on this issue?" (In Krosnick's (1988) original analysis of these data, this scale was dichotomized at 85.)

Study 3

Waves 1 and 10 of the ANES 2008–2009 Online Panel included identical measures of attitude on eight issues:

- Do you favor, oppose, or neither favor nor oppose an amendment to the U.S. Constitution banning marriage between two people who are the same sex?
- Do you favor, oppose, or neither favor nor oppose raising federal income taxes for people who make more than $200,000 per year?
- Do you favor, oppose, or neither favor nor oppose the U.S. government paying for all of the cost of prescription drugs for senior citizens who are living on very little income?
- Do you favor, oppose, or neither favor nor oppose the U.S. government paying for all necessary medical care for all Americans?
- Imagine that the U.S. government suspects a person in the United States of being a terrorist. Do you favor, oppose, or neither favor nor oppose the government being able to put this person in prison for months without ever bringing the person to court and charging him or her with a crime?
- Do you favor, oppose, or neither favor nor oppose the U.S. government being required to get a court order before it can listen in on phone calls made by American citizens who are suspected of being terrorists?

- Citizens of other countries who have come to live in the United States without the permission of the U.S. government are called "illegal immigrants." Do you favor, oppose, or neither favor nor oppose allowing illegal immigrants to work in the United States for up to three years, after which they would have to go back to their home country?
- Do you favor, oppose, or neither favor nor oppose the U.S. government making it possible for illegal immigrants to become U.S. citizens?

The response options were also the same for each question and involved a branching format. After the first part of the question, respondents were asked to select among 'favor,' 'oppose,' and 'neither favor nor oppose' response options. Afterward, those respondents selecting 'favor' or 'oppose' were asked about the degree of their support ('a great deal,' 'moderately,' or 'a little'). Each attitude question was also paired with a measure of self-reported attitude importance: "How important is this issue to you personally?" that offered respondents five response options: 'extremely important,' 'very important,' 'moderately important,' 'slightly important,' or 'not at all important.'

In addition, waves 11 and 13 measured the standard ANES spending/services question along with measures of attitude importance in both waves: "Do you think that the government should provide more services than it does now, fewer services than it does now, or about the same number of services as it does now?"

Study 4

Waves 2, 6, 9, 10, and 11 of the Online Panel additionally measured attitudes about U.S. troops in Iraq. Specifically, one question asked "Compared to the number of U.S. troops in Iraq now, should the number of troops in Iraq three months from now be more, less or about the same?" The second question asked "Do you favor, oppose, or neither favor nor oppose setting a deadline for withdrawing all U.S. troops from Iraq?" Each question at all waves was followed by a measure of attitude importance (except Wave 2, where a single measure of attitude importance was used in relation to both questions).

All of the questions on the ANES 2008–2009 Online Panel used a branching format, where responses were initially recorded on a three-point scale and follow-up questions were asked to sort respondents into final response categories. See codebook for details.

Study 5

The Patterson 1976 panel measured attitudes on nine issues on each of the five waves. The exact question wordings were as follows:

- Some people think achieving racial integration of schools is so important that it justifies busing children to schools out of their own neighborhoods. Others think letting children go to their neighborhood schools is so important that they oppose busing.
- As a way to reduce unemployment, most people feel the government should help business to prosper so that more jobs are created. But people have different attitudes about the government directly providing jobs. Some people want a federal job program, where the government

directly provides jobs to those who cannot otherwise find employment. Others do not want the government directly to provide jobs to those out of work.

- Some people think our military strength has diminished in comparison to Russia and that much more must be spent on planes, ships, and weapons to build a stronger defense. Others feel that our military defense is adequate and that no increase in military spending is currently necessary.
- Some people feel that the government should take direct action to control wages and prices so that inflation can be kept in check. Others think that government control of wages and prices is not the way to deal with inflation.
- Some people emphasize tougher laws and longer jail sentences to deal with the high crime rate in this country. Others emphasize trying to solve the problems of poverty and unemployment that turn some people to crime.
- Some people feel that American must be willing, except for the use of military force, to become deeply involved in the internal affairs of other countries when it seems necessary. Others feel the government should stay out of the internal affairs of other countries.
- There is a lot of talk these days about the level of spending by the federal government for social welfare programs. Some people feel that the current level of social welfare spending is necessary because almost everyone receiving this government help really needs it. Others feel a great deal of this social welfare spending is wasted because a lot of people receiving this government help don't deserve it.
- Some people favor legalized abortion, that is, they feel that a woman who desires an abortion should be able to have one. Other people are against legalized abortion.
- Most everyone favors a cut in personal income taxes, but there is disagreement about the nature of a tax cut. Some people want a tax cut that is intended to benefit all income groups about the same. Other people want a tax cut that is intended to benefit modest and low income groups much more than it benefits the high income groups.

After the entire battery of attitude questions, respondents were handed a card listing each of the nine issues and were instructed: "Please sort the cards into the most important issues to you, those that are somewhat important, and the least important issues to you. Put three cards in each category." While this is a somewhat imprecise measure of attitude importance, it does provide an issue-specific measure of subjective importance expressed as a ranking relative to other issues rather than a typical rating measure. The difference in measurement, however, provides a robustness check on the results. Importance ratings were coded to range from 0 to 1.

Study 6

The attitude question used in Study 6 read: "Thinking about energy related restrictions, to what extent do you oppose or support requiring electricity providers to purchase energy generated from renewable sources (e.g., wind, solar)?" Responses were recorded on a seven-point scale from "strongly opposed" to "strongly support". Attitude importance was measured by asking: "How important to you personally is your opinion about this renewable energy restriction?"

Self-interest was manipulated to be high by telling respondents that "A new law is currently moving through Congress that would require your electricity provider to purchase energy from renewable sources (e.g., wind and solar). This is relevant to you since it will influence your energy bills and the environment. The law would go into effect immediately." Self-interest was manipulated to be low by telling respondents that "Some have proposed a bill that would require electricity providers to purchase energy from renewable sources (e.g., wind and solar). This is probably not relevant to you because Congress does not appear ready to act on the bill and even if they did it is unlikely to personally affect you."

The pro and con arguments were as follows:

Pro: "Renewable Energy Rules Beneficial"
The proposed federal law would create uniform nationwide standards which is necessary since many states have not adopted renewable energy provisions. The new standards would require electricity utilities to produce between 10% and 30% of their energy from renewable sources especially wind power as well as potentially innovative new sources of energy. This in turn would reduce pollution. The impact on consumers is also affordable: adopting a nationwide standard would increase monthly electricity bills by only about 1%. Renewable standards therefore reduce reliance on fossil fuels for energy production without dramatically increasing costs to American consumers.

Con: "Renewable Energy Rules Ineffective"
The proposed federal law would intervene in state policies and regulate private businesses to create uniform nationwide standards, where up until now many states have not adopted renewable energy provisions. The new standards would drive down innovation by requiring energy utilities to adopt specific technologies (e.g. wind power) rather than directly targeting the reduction of polluting greenhouse gas emissions. The impact on consumers is also problematic: adopting a nationwide standard would increase monthly electricity bills by up as much as 4%. Renewable standards therefore increase the cost of energy through government regulation without directly addressing potential environmental impacts of energy production from fossil fuels.

Table 1: Study 3 Results

	Mean Importance (SD)	Coefficient
Same-sex Marriage	0.48 (0.35)	-0.04 (0.10, $p <= 0.69$)
Taxes	0.57 (0.29)	-0.32 (0.08, $p <= 0.00$)
Prescription Drugs	0.64 (0.28)	-0.33 (0.09, $p <= 0.00$)
Healthcare	0.70 (0.26)	-0.27 (0.10, $p <= 0.01$)
Habeas Corpus	0.65 (0.27)	-0.08 (0.10, $p <= 0.42$)
Wiretapping	0.66 (0.28)	-0.15 (0.11, $p <= 0.19$)
Guest Workers	0.65 (0.29)	-0.13 (0.11, $p <= 0.22$)
Path to Citizenship	0.62 (0.29)	-0.29 (0.10, $p <= 0.00$)
Government Spending	0.57 (0.24)	-0.06 (0.04, $p <= 0.08$)

Note: Column 1 reports mean levels of attitude importance for each issue (with standard deviation in parentheses). Column 2 reports the ordinary least squares coefficient, standard error, and p-value for attitude importance as a predictor of absolute attitude change.

Table 2: Study 5 Results

	Mean Importance (SD)	Coefficient
Busing	0.26 (0.27)	0.01 (0.01, $p <= 0.37$)
Jobs	0.73 (0.28)	-0.01 (0.01, $p <= 0.31$)
Defense	0.46 (0.31)	0.00 (0.01, $p <= 0.90$)
Prices	0.57 (0.28)	0.00 (0.01, $p <= 0.72$)
Crime	0.62 (0.28)	-0.01 (0.01, $p <= 0.31$)
Intervention	0.48 (0.31)	-0.03 (0.01, $p <= 0.00$)
Welfare	0.59 (0.27)	-0.01 (0.01, $p <= 0.63$)
Abortion	0.21 (0.28)	0.01 (0.01, $p <= 0.21$)
Taxes	0.56 (0.29)	0.02 (0.02, $p <= 0.27$)

Note: Column 1 reports mean levels of attitude importance for each issue (with standard deviation in parentheses). Column 2 reports the ordinary least squares coefficient, standard error, and p-value for attitude importance as a predictor of absolute attitude change.

Figure 1: Expected Pattern of Stability Across Levels of Attitude Importance

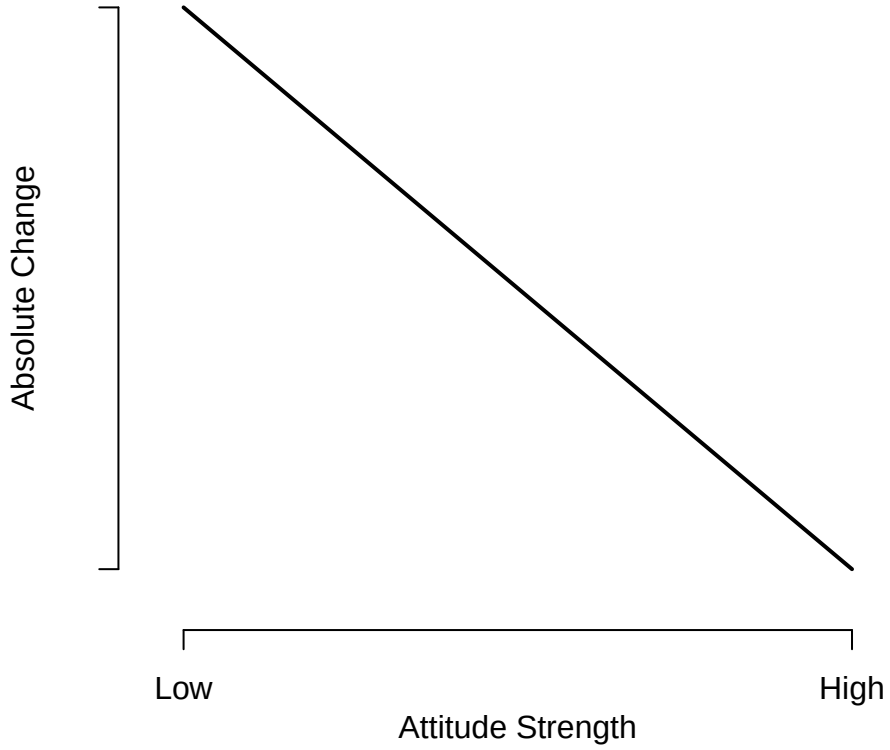
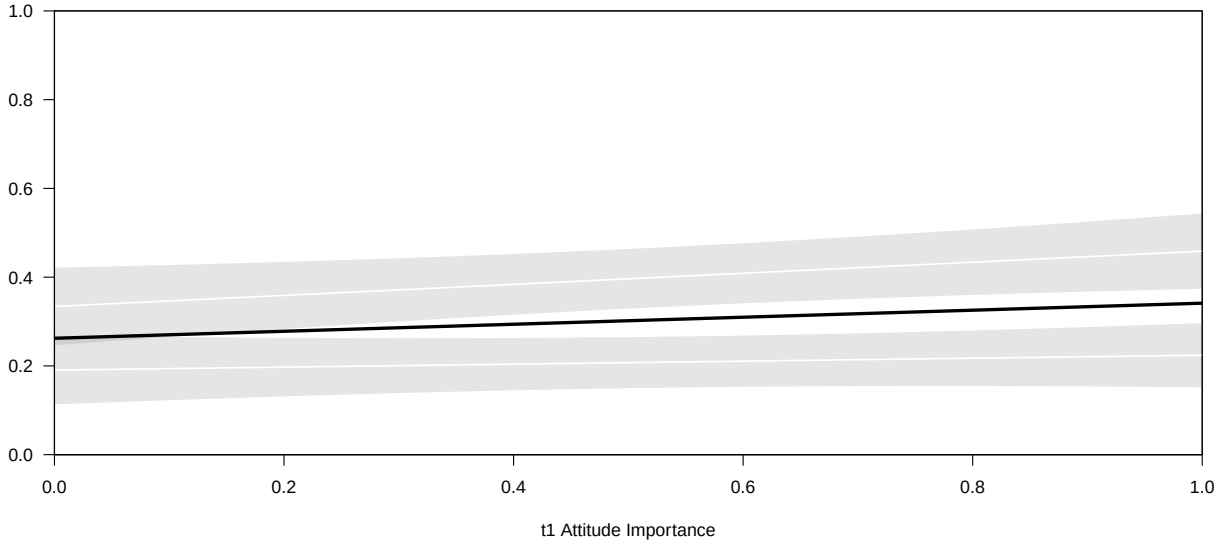
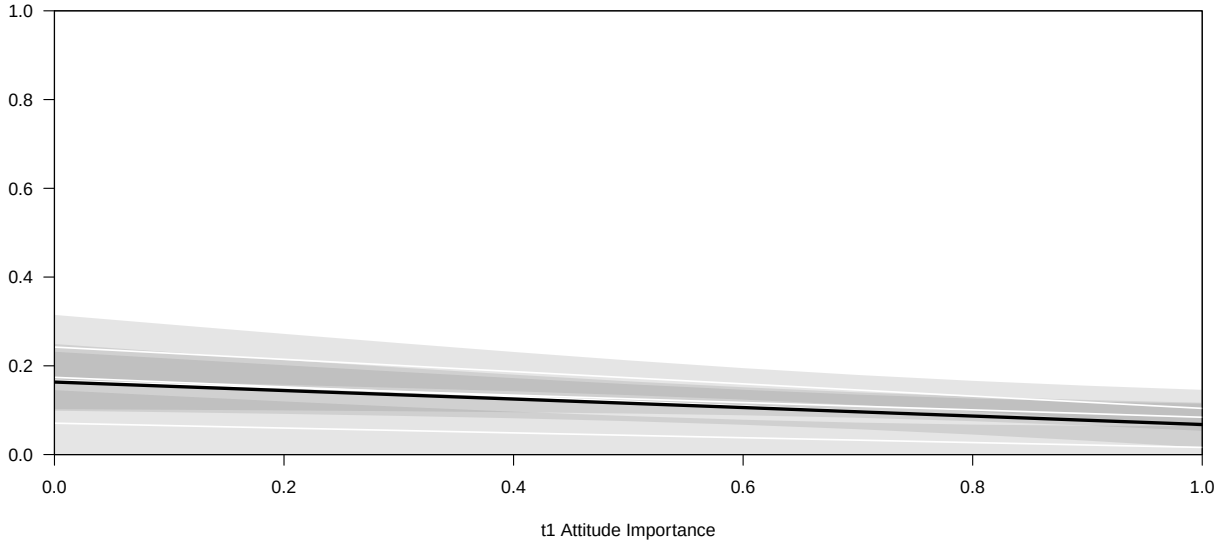


Figure 2: Fitted Absolute Attitude Changes, by Importance (Study 1)



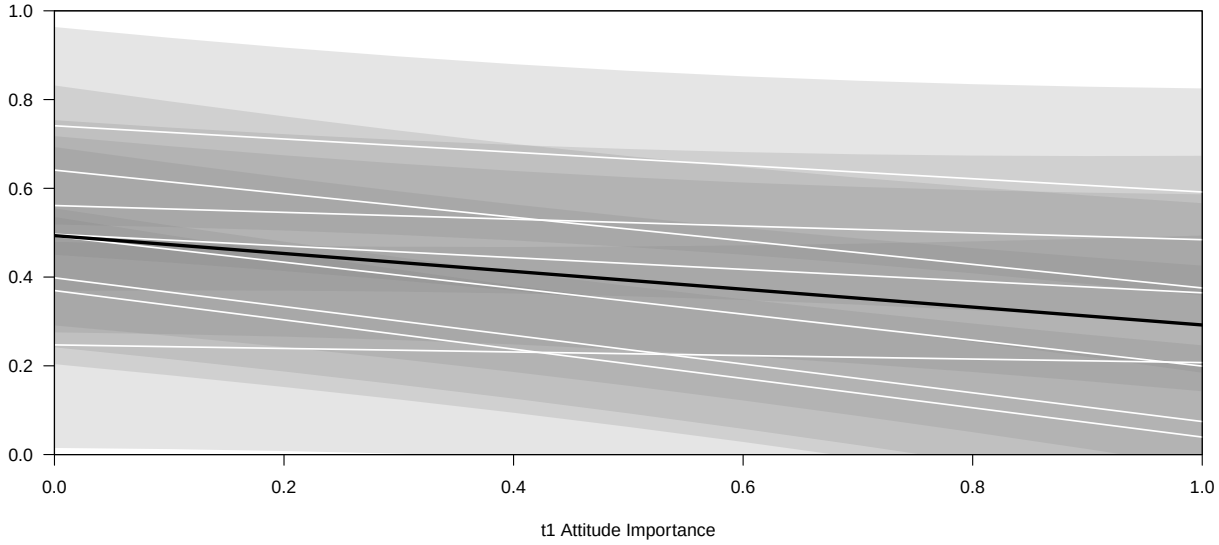
Note: White lines (and gray polygons) are fitted values (and 95%-confidence region) from regressions of absolute $t_2 - t_1$ attitude changes on importance for both policy issues. Black line represents the average of the fitted lines. In several places, no means are presented or means are shown without corresponding standard deviation bars due to a lack of underlying data. Source: ANES 1984.

Figure 3: Fitted Absolute Attitude Changes, by Importance (Study 2)



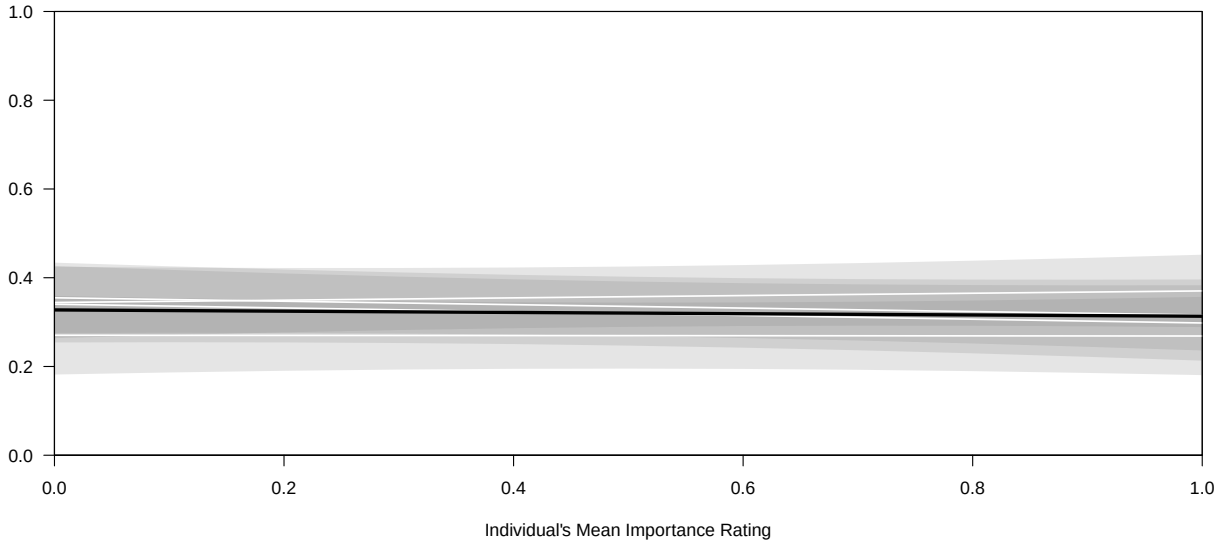
Note: White lines (and gray polygons) are fitted values (and 95%-confidence region) from regressions of absolute $t_2 - t_1$ attitude changes on importance for each of the four policy issues. Black line represents the average of the fitted lines. Source: ANES 1980 Combined Panel, Waves 1 and 3.

Figure 4: Fitted Absolute Attitude Changes, by Importance (Study 3)



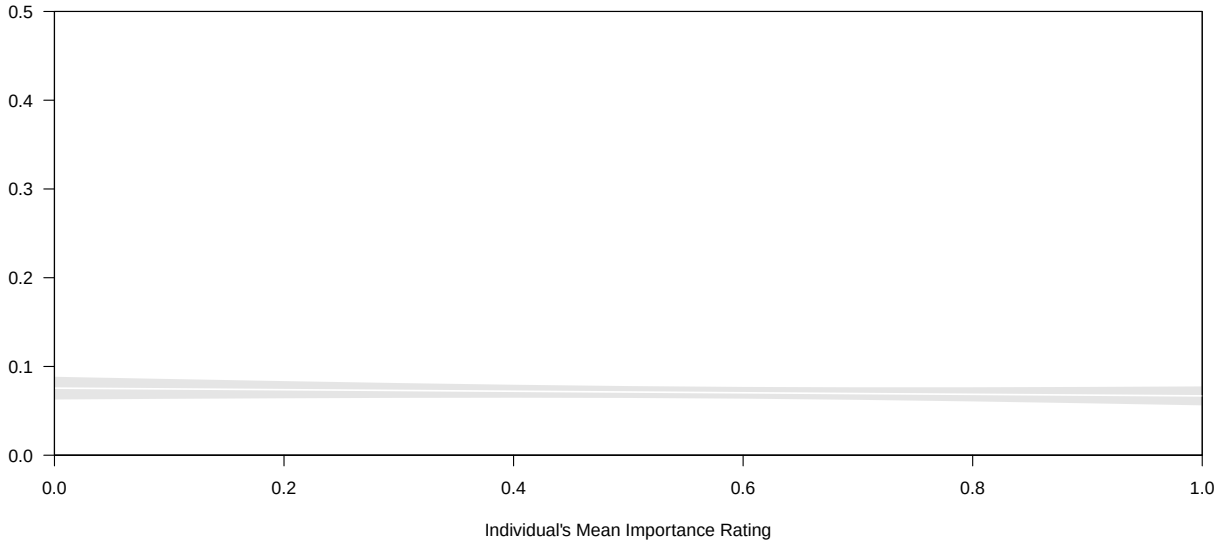
Note: White lines (and gray polygons) are fitted values (and 95%-confidence region) from regressions of absolute $t_2 - t_1$ attitude changes on importance for each of eight policy issues. Black line represents the average of the fitted lines. Source: ANES 2008–2009 Online Panel, Waves 1 and 10.

Figure 5: Fitted Absolute Changes in Attitudes Between Waves, by Importance (Study 4)



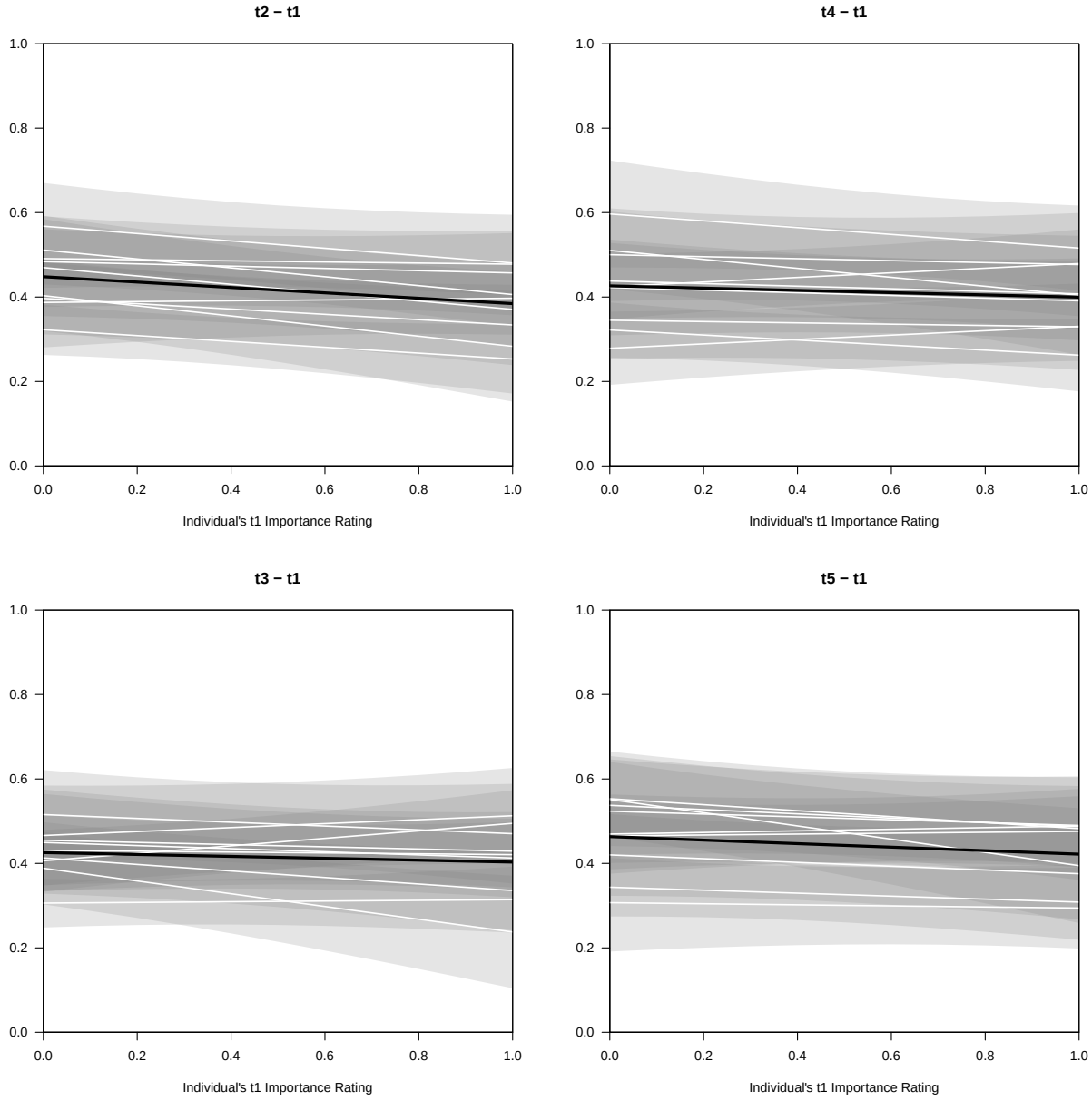
Note: White lines (and gray polygons) are fitted values (and 95%-confidence region) from regressions of absolute $t_2 - t_1$ attitude changes (for Waves 2–5 against Wave 1) on importance. Black line represents the average of the fitted lines. Source: ANES 2008–2009, Waves 2, 6, 9, 10, and 11.

Figure 6: Fitted Individual-level Variances in Attitudes Over-Time, by Importance (Study 4)



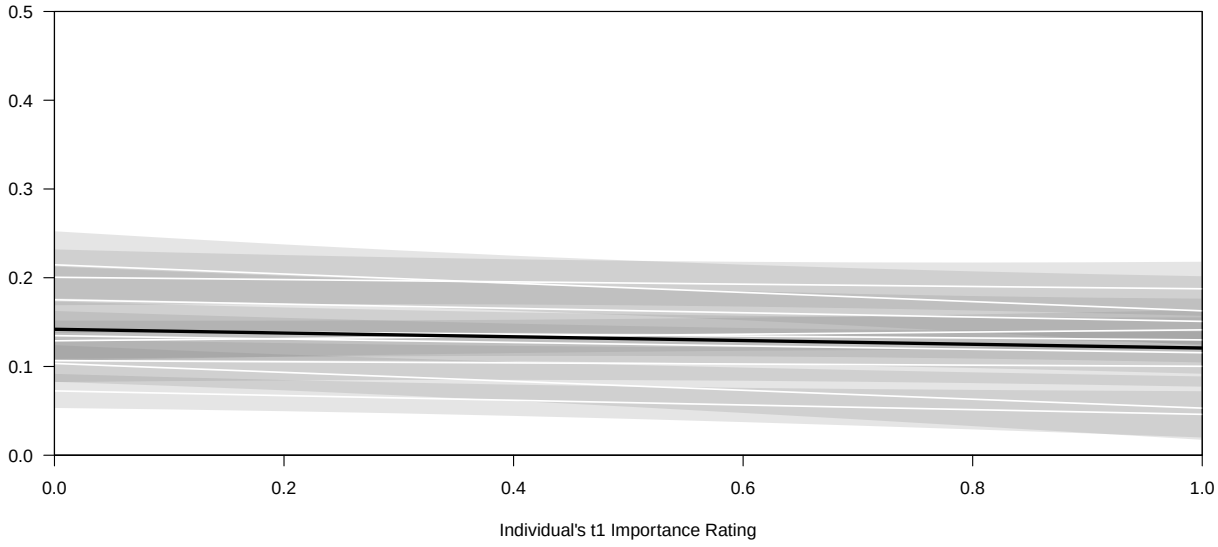
Note: Black line (and gray polygon) are fitted values (and 95%-confidence region) from regressions of individual-level attitude variances on attitude importance. Source: ANES 2008-2009 Online Panel, Waves 2, 6, 9, 10, and 11.

Figure 7: Fitted Absolute Changes in Attitudes Between Waves, by Importance (Study 5)



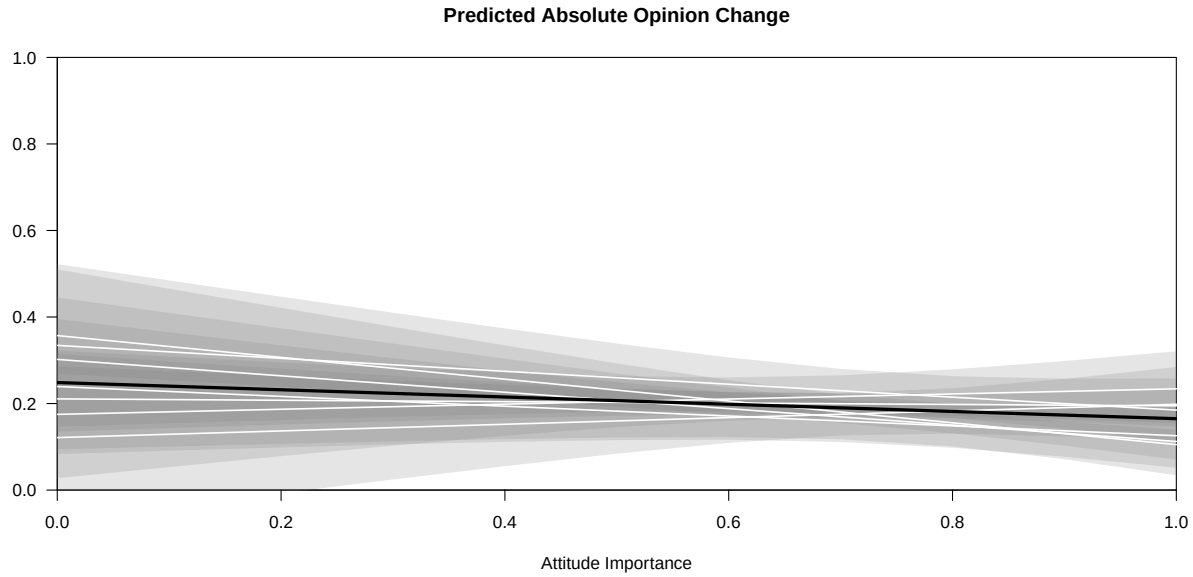
Note: White lines (and gray polygons) are fitted values (and 95%-confidence region) from regressions of absolute $t_2 - t_1$ attitude changes on importance for each of nine policy issues. Black line represents the average of the fitted lines. Source: Patterson 1976 Panel, all waves.

Figure 8: Fitted Individual-level Variances in Attitudes Over-Time, by Importance (Study 5)



Note: White lines (and gray polygons) are fitted values (and 95%-confidence region) from regressions of individual-level attitude variances on importance for each of nine policy issues. Black line represents the average of the fitted lines. Source: Patterson 1976 Panel, all waves.

Figure 9: Fitted Absolute Changes in Attitudes Between Waves, by Importance (Study 6)



Note: White lines (and gray polygons) are fitted values (and 95%-confidence region) from regressions of absolute $t_2 - t_1$ attitude changes on importance for each of seven experimental conditions. Black line represents the average of the fitted lines. Source: Author.