



Framing Child Abuse and Neglect:
Effects of Early Childhood Development Experimental Research

A FrameWorks Research Report

Prepared for the FrameWorks Institute
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This report summarizes results from the latest iteration of FrameWorks experimental research focusing specifically on outcomes related to policies and programs associated with prevention and treatment of child abuse and neglect (as captured in an Abuse and Neglect Battery) as well as additional policies associated with improving children's healthy development, family assets, education and mental health. In the analysis that follows, supported by Prevent Child Abuse America and the Doris Duke Foundation, we report the findings from our experiments testing the effects of 17 frame elements (Values, Simplifying Models, and Principles) against four general outcomes of interest related children's development and well-being. These four outcomes are: (1) levels of support for policies meant to address child well-being, (2) the overall salience of those policies, (3) the level of support for funding those policies and, more generally, (4) the extent to which people attribute responsibility for advancing children's development and well-being to collective, rather than solely to individual, action.

The first of these outcomes (policy preferences) was assessed using a fairly exhaustive method focused on five policy batteries that tapped the approval-disapproval dichotomy of a wide variety of issues related to early childhood development and/or child welfare policies. The second of these outcomes (policy salience) was assessed using a set of questions that asked respondents to rank poverty, education, child abuse and other issues on a scale ranging from "most important" to "least important" after being exposed to our test frame elements. Willingness to pay, a much more difficult concept to capture, was assessed using a set of questions that asked respondents to rank their preferred way to address the financial costs of policies that seek to advance children's development and wellbeing. Finally, attribution of responsibility was evaluated using a series of attitudinal indices that solicited respondents' viewpoints on the role of government in addressing a set of more general child development related issues.

This report is organized as follows: after a brief description of the experimental design, sampling methods, and outcome measurement issues, the findings from the experiments we tested (specifically as they relate to the Abuse and Neglect Battery) are discussed in some detail. The final section of the report summarizes a few of the key findings and discusses the implications for communicating about the science of early child development in relationship to child abuse and neglect.

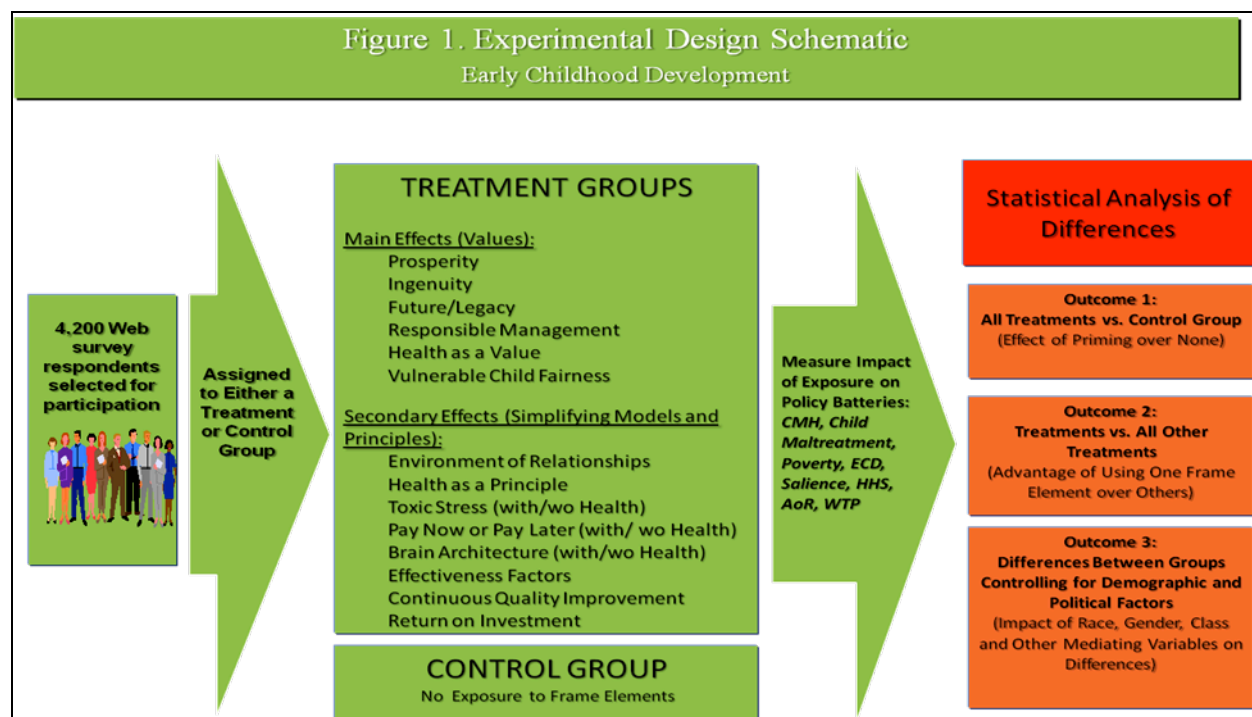
RESEARCH METHODS

The experiments detailed in this report were designed to ascertain whether exposing politically and civically engaged persons to alternative ways of thinking about children's development, as expressed in frame elements, has a measureable impact on a broad set of outcomes: (a) policy preferences, (b) issue salience, (c) public funding approval, and (d) attribution of responsibility for addressing these issues to collective, rather than solely to individual, action. As a secondary concern, we also wanted to ascertain how the frame elements performed across race, gender, class and political cleavages. That is, we were interested in the extent to which there were observable and significant differences in the effectiveness of the frame elements across key demographic and political factors.

Broadly construed, we test these two propositions using a web-based survey of 4,200 registered voters in an interactive venue administered by the Political Communications Laboratory (under

the direction of Dr. Shanto Iyengar) and Polimetrix at Stanford University (under the direction of Dr. Douglas Rivers).

The Experimental Design. The experimental design largely consisted of exposing a group of randomly assigned survey participants to one of 17 treatment conditions (or to a control) and subsequently, measuring their responses to a series of policy related questions (or policy batteries).¹ Figure 1 provides a more detailed schematic of the experimental design which includes a list of the treatments, the complete set of policy batteries to which respondents were asked to react, as well as the statistical comparisons conducted as part of evaluating the performance of the frames tested.



In this report, we concentrate the analysis on one of five policy batteries – Abuse and Neglect. In general, each of the policy batteries was comprised of about 5 to 8 specific public policy proposals chosen selectively from the larger set of proposals representative of the kinds of policies typically advocated by child development experts and/or advocates. We collected and categorized these policies into five discrete policy groupings and gave each group of policies a name reflective of the policies included.²

The policy batteries were tested in several ways to ensure their appropriateness in evaluating our frame elements. First, we pre-tested each of the policy batteries with a small pilot sample of 125 people. We then checked the inter-item correlations between the respective questions within each policy battery and subsequently performed a factor analysis to confirm that they were, in fact, distinct. The results of our statistical tests indicated that all of the policy batteries represented distinct underlying factor structures. We then performed a Cronbach's Alpha test for the fidelity of the scales in the batteries to gauge their overall reliability. All tests demonstrated that the respective scales displayed coefficients of .86 or higher which is well above the range of

acceptability. The Abuse and Neglect Battery (a seven-item index that measures support for programs aimed at providing solutions to the problem of child abuse and neglect) had a coefficient Alpha of .86. Finally, because we could ensure the consistency of the appropriateness of this battery as a legitimate category for analysis, we collapsed it into a single index variable and, for greater ease of interpretation, rescaled it to range from 0 to 1.

In terms of the format of the experiments, respondents were first asked to respond to a series of introductory questions where they rated their level of concern about a short series of unrelated political issues. To avoid contamination of testing effects, the series of political issues offered to respondents was rotated each time the survey was administered and was quite broad in subject matter. Immediately following this series of questions, respondents were shown their assigned treatment (essentially, the narrative expression of one of the frame elements) and subsequently, they were asked to answer questions related to their support for the policies in each of the policy batteries, attitudinal questions about the role of government, policy priorities, and then, questions about willingness to support public funding. Questions within each of these outcome areas were also rotated to mitigate any testing effects contamination.

The Samples. In this study, a nationally representative sample of 4200 registered voters was gathered using a Random Digit Dial (RDD) sampling frame weighted on the basis of gender, age, race, education, and party identification.³ Selected demographic and political interest characteristics of the sample are detailed for review in Table 1.⁴

The median age of respondents in the sample was 49. Fifty-three percent were women, 77 percent were white, and approximately 30 percent were college graduates (high school graduates made up about 35 percent). In terms of partisan affiliation, 39 percent were Democrats, 31 percent Republican, and 30 percent non-partisan.

Demographic Characteristics		Political and Civic Interest	
Has Attended a Church in Recent Months	55%	Registered to Vote	100%
Age	0 to 24 yrs. 7.3% 25 to 39 yrs. 32.3% 40 to 55 yrs. 33.7% 56+ yrs. 34.1%	Partisanship	Democrat 38.8% Republican 30.7% Independent 25.5% Other 5.0%
Race/Ethnicity	White 77.2% Black 11.1% Hispanic 6.5% Asian 1.1% Native American 1.2% Other 2.8%	Ideology	Very Liberal 8.5% Liberal 17.7% Moderate 31.8% Conservative 23.3% Very Conservative 13.1% Not Sure 5.7%
Income	Less than 70K 53.6% More than 70k 43.7%	Political Interest	Very Much Interested 70.2% Somewhat Interested 24.8% Not Much 5.1%
Education	Less than High School 3.7% High School 35.6% Some College 23.2% 2 year Degree 7.4% 4 year Degree 19.8% Post- Graduate Degree 10.4%		
Marital Status	Married/Dom. Partnership 63.6% Single/Widowed/Divorced 36.4%		
Gender	Male 47% Female 53%		
Region	South 34.0% Northeast 20.1% Midwest 18.2% West 27.7%		

THE FINDINGS

The policy questions in these experimental tests center broadly on children's development and, although some specifically address the safety and well-being of children, the questions in the Child Abuse and Neglect Battery directly address these issues. More explicitly, the Child Abuse and Neglect Battery is comprised of seven discrete questions about policy proposals that address child abuse prevention and/or treatment. Figure 2 provides the specific text of each question in the battery.

FIGURE 2. CHILD MALTREATMENT BATTERY

1. Provide additional resources to community programs that work to prevent child neglect.
2. Conduct more research and program evaluation to make existing child abuse prevention programs more effective.
3. Make life education part of every school's curriculum, including information on age-appropriate child development, as well as child abuse and neglect prevention.
4. Ban physical punishment in all schools and institutions that serve kids.
5. Make it easier for judges and courts who deal with family issues related to abuse and neglect or custody of young children to order intervention programs as early as possible.
6. Forgive federal loans for students who become trained and work for at least five years as child welfare workers.
7. Improve foster care and adoption systems by minimizing multiple placements and disruptions in relationships for very young children.

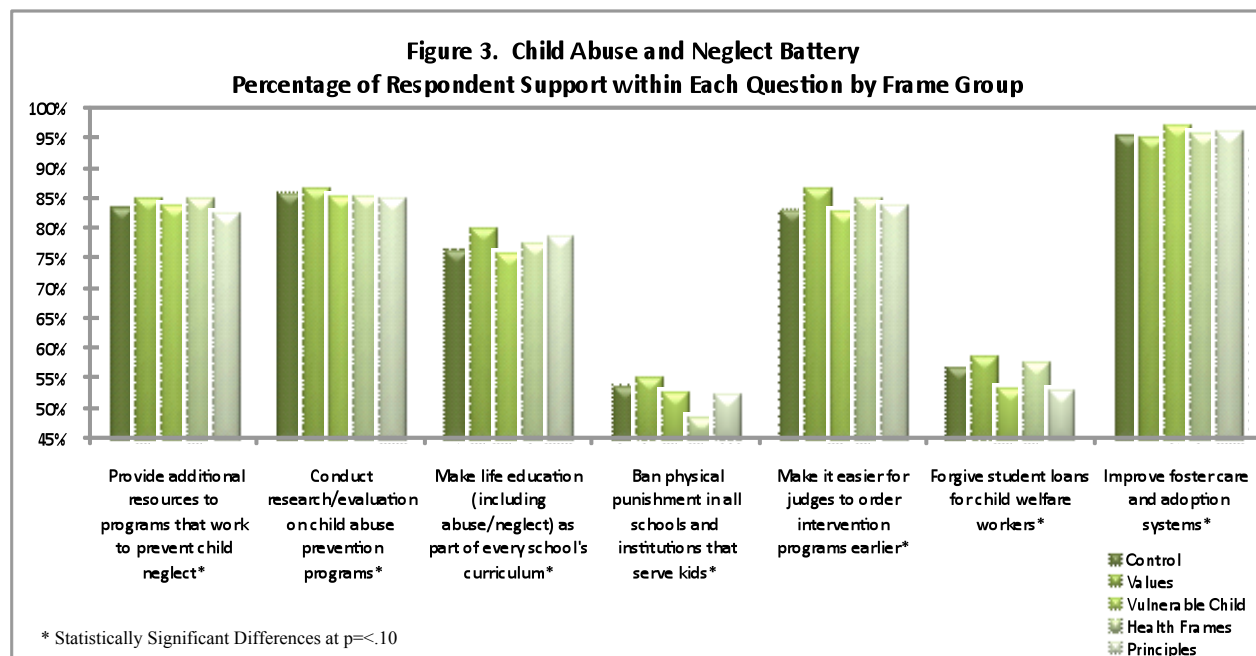
Policy Support. In many ways, the policy proposals in the Child Abuse and Neglect Battery proved to be quite different from the other proposals on children's development and well-being that were examined as part of this round of experimental testing. We discuss these differences throughout the paper but it is worth pointing out two observations at the outset of these findings. First, we found strong support for a much wider range of the frame elements on this issue than in most other issue areas tested. Second, we found that the levels of policy support for child abuse and neglect issues occur at both end of the support continuum. That is, we found policies that garnered both the highest and lowest levels of support (compared to all other policy batteries) in the Child Abuse and Neglect Battery. In essence, we present evidence in this report that respondents were especially sensitive to policy questions around the physical and emotional welfare of children, in ways that bode well for child welfare advocates.

In the battery we find that the highest support (not only in this battery but across all policy batteries in these experiments) is found for policies that would improve foster care and adoption systems (95% in the control condition and 96% in the treatment conditions). That is, more than any other policy proposal we tested, support for reforming the child welfare system struck a deep-seated and intense chord among survey respondents.

The lowest level of respondent support across all of the batteries is found, predictably, for the idea of banning physical punishment in all schools and other institutions that serve children (55% in the control condition and 52% in the treatments condition). We say “predictably” because although child development experts have evidence that now strongly confirms the negative impacts of subjecting children to corporal punishment, especially very young children, the significance of the idea of strong discipline as a way to teach children to behave and develop self-regulatory skills, is still very much alive in the dominant cultural models of parenting in the United States, as evidenced in numerous FrameWorks research reports.

In addition to the question on physical punishment of children, we also note here that a second policy in this battery (loan forgiveness for people who choose to work in public welfare institutions) also demonstrated noticeably low levels of policy support when compared to other policies in the Child Abuse and Neglect Battery as well as across other batteries.

To begin our analysis of the relative importance of the frame elements, we first grouped the frames into small sub-groups that reflected the distinction between: (1) the frames we developed from the qualitative research as being likely to be powerful reframes in this policy area (*Values*) and (2) other frames that arose from the conventional wisdom and communication patterns of advocates (*Vulnerable Child*, *Health* related frames, and *Principles* from the ECD literature). These groups are compared on policy support in Figure 3, side-by-side with the control condition in each policy question.



First, we note that differences across the groups on these questions were all highly statistically significant. Moreover, across all of the questions in Figure 3, except for child welfare system reforms, the Values category (which combines respondents exposed to Prosperity, Ingenuity, Future, and Responsible Manager frames) provides the greatest lift in policy support. And, when we look even more closely at Figure 3, we see that there are two policy questions in the battery

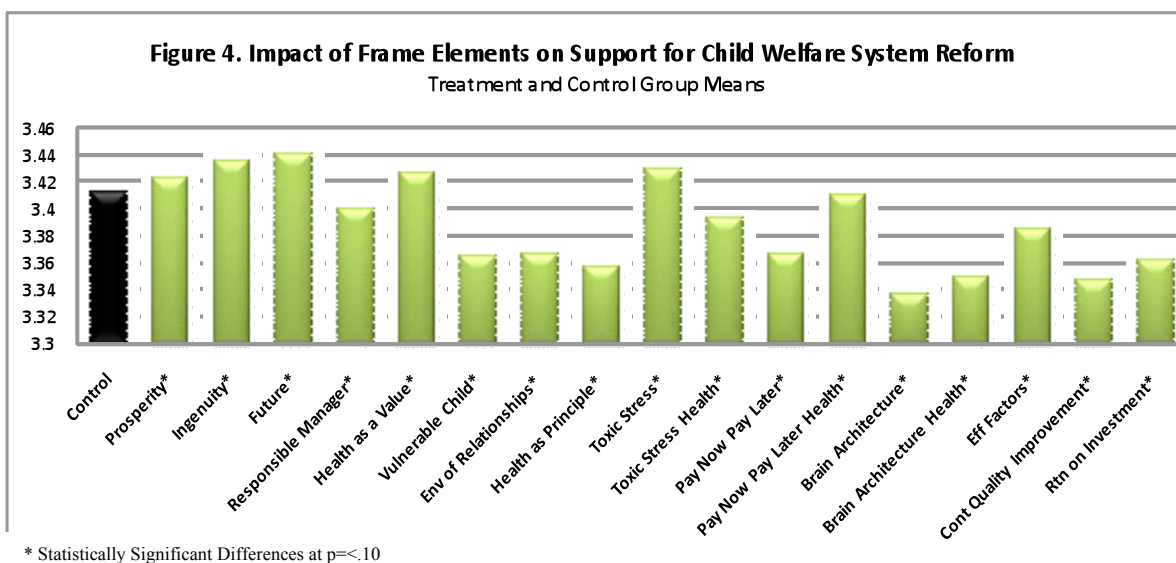
where the Values (in the aggregate) seem to make more substantial inroads in increasing policy support compared to the others: (1) the provision of greater support for judicial discretion regarding intervention programs and (2) provision of educational activities that focus on child abuse prevention and treatment efforts.

In terms of the one exception to the overall pattern of frame effects, child welfare system reform, all frames tended to perform quite well – which may speak more to the fact that this issue enjoys widespread support generally. Even so, it is notably interesting that the Vulnerable Child frame, which performed only marginally well in the other parts of the Child Abuse and Neglect Battery, is able to demonstrate support for child welfare reform – and nothing more.

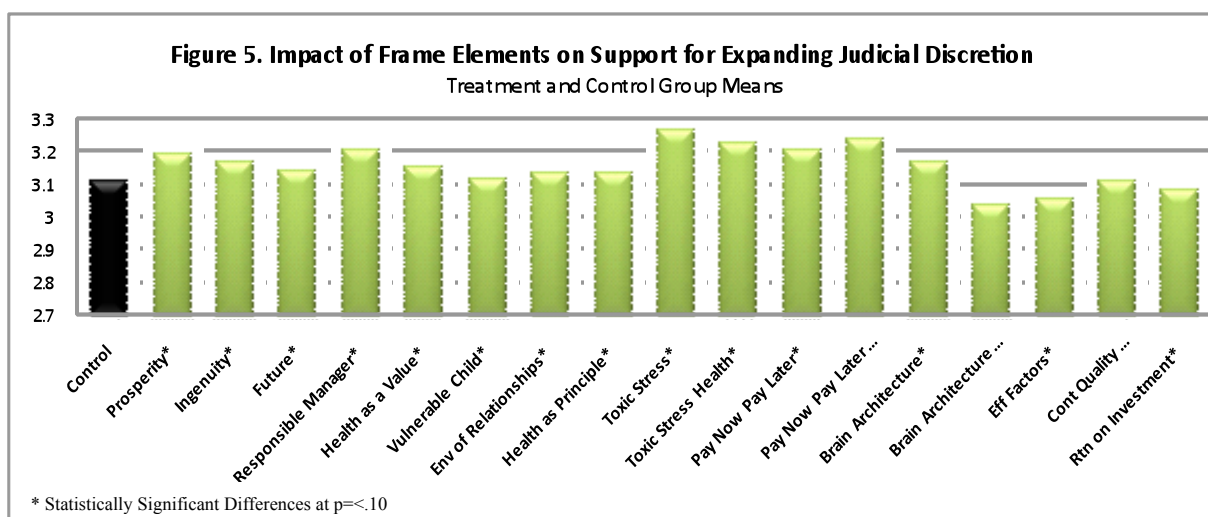
Discerning the Effects of Individual Frames on Policy Support. In addition to understanding how some of the frames perform when grouped with other related frames, we also wanted to discern the effect of individual frames, which required the frame specific analyses presented below. For ease of interpretation, we present here a discussion of the effect of the frames on three policies of particular interest: (1) support for child abuse prevention education, (2) judicial discretion in adjudicating child abuse cases, and (3) improvements in the child welfare system. We then compare the performance of the entire Child Abuse and Neglect Battery across the wider array of policy batteries that were examined in this iteration of the experiments.

- **Policy Support for Child Welfare Reform.** Of all of the questions in the Child Abuse and Neglect Battery, the greatest levels of policy support were found for child welfare reform. From the analyses presented above, we already knew that this was the one area where the Vulnerable Child frame performed well in terms of demonstrating overall policy support but we also wanted to know how the other individual frames performed on this question once they were disaggregated. To address this line of inquiry, we examined the means on policy support across each individual frame element and results from these analyses are summarized in Figure 4. Keeping in mind that the differences explored below in Figure 4 make use of a finer measuring stick than we used in Figures 3 (means tests as opposed to general frequency tests), Figure 4 illustrates a more nuanced picture. When we look at mean levels of support for child welfare reform, we find that all four Values and several other frame elements we tested (Health as a Value, Toxic Stress with and without Health information attached, Pay Now/Pay Later with Health, and Effectiveness Factors) actually out-perform Vulnerable Child. Moreover, the treatment effects across all frames were highly significant.

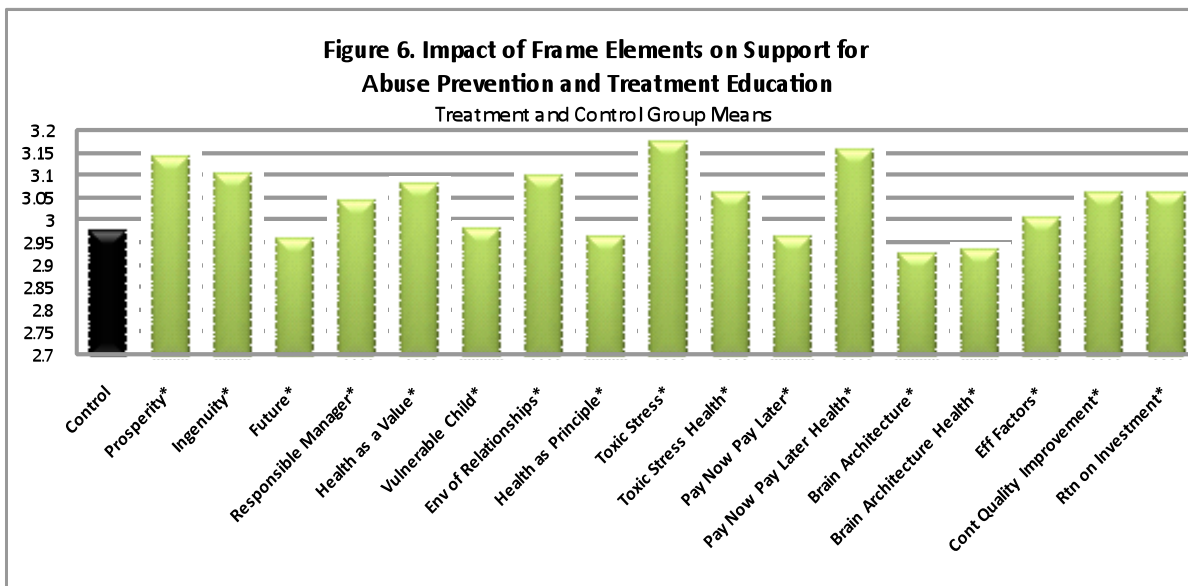
Thus, while the previous data in Figure 3 suggests that Vulnerable Child as a frame is useful in terms of getting people to support child welfare reform policies generally, this frame does not perform as well as other frames in terms of lifting the level of support. This is an important distinction to make on an issue such as this, where public support is generally already high. Vulnerable Child is useful to the extent that it seems to impact the percentage of people who say they favor or strongly favor child welfare policies; however, it has no affect on how strong their support is once they are signed onto the issue. This is unfortunate, since the main challenge on issues of child abuse and neglect is not to convince people of the need to support child welfare reform (the control condition tells us that the public is generally already there); but rather, to *increase the extent* of their support for this kind of policy. Figure 5 provides substantial evidence that some frames do the latter (move respondents from favoring to strongly favoring) much more effectively than others.



- Policy Support for Expanded Judicial Discretion.** Support for policies that would give greater discretion to judges in terms of their ability to offer intervention programs to families much earlier than they are currently provided also enjoyed a high level of support. This policy proposal was particularly interesting because it was one of two policy areas in the battery where policy support proved to be much more sensitive to framing. Figure 5 summarizes the treatment impacts and shows that 12 of the 17 treatments were able to lift the level of policy support of survey respondents who were exposed to them. Toxic Stress (with and without Health information attached), Pay Now/Pay Later (with and without Health information attached), Responsible Manager, and Prosperity garnered the greatest increases in support (an average of 10 percentage points) but several other frames also showed statistically significant increases.



- Policy Support for Greater Education around Abuse Prevention and Treatment.** A second area where the treatment effects proved to be particularly sensitive to the frame elements we tested was on the issue of providing greater education around abuse prevention and treatment efforts. Overall support for this policy was just shy of 80% of all survey respondents. Figure 6 allows us to ascertain how the individual frame elements affect this support. It shows that 11 of the 17 frame elements lift policy support and that Prosperity, Ingenuity, Toxic Stress, and Pay Now/Pay Later (with Health information attached) all do so much more effectively than other treatments or the control condition.



To take this analysis one step further, we also estimate the treatment effects in a multivariate context. This allows us to control for the effects of key covariates (mostly demographic and political factors). The set of covariates we included and the direction of the influences they exerted on policy support are as follows: age (younger respondents were much more likely to support policies in the battery); party affiliation (Democrats were substantially more likely to offer their support); gender and marital status (married women were especially supportive of a more activist stance); education, and ethnicity (support for government intervention increased among the more educated and non-whites).

In terms of the specific estimation method for the multivariate analysis, we used an index variable that combined the means for each question in the battery as the dependent variable and entered the covariates (identified above) as predictors along with a dummy variable (scored 0 or 1) corresponding to each of the experimental conditions. We outline the specific functional form that the Child Abuse and Neglect Battery took and note that all of the policy batteries were estimated in this same manner:

$$\begin{aligned}
 [1] \text{ Child Abuse and Neglect Battery} = & b_0 + b_1 \text{Party Identification} + b_2 \text{Education} + \\
 & b_3 \text{Gender} + b_4 \text{Whites} + b_5 \text{Married Women} + b_6 \text{age} + b_7 \text{region} + b_8 \text{religious} \\
 & \text{affiliation} + b_9 \text{income} + b_{10} \text{newsinterest} + b_{11} \text{Treatment}_1 \dots + b_{28} \text{Treatment}_{17} + e
 \end{aligned}$$

The regression coefficients associated with the treatment conditions in this equation (i.e. b_{11} through b_{28}) estimate the independent impact of each condition on the dependent variable in question, after adjusting for the effects of the covariates. Because the policy batteries are scaled on a 0-1 metric, the regression coefficients associated with the 17 conditions indicate the percentage difference in the level of policy support between participants assigned to each condition and those assigned to the control condition. A b_{11} coefficient of .05, for instance, means that the effect of Treatment₁ amounts to a five percent increase in the score of the dependent measure.

Table 2 summarizes the results of the multivariate analysis for all of the policy batteries we examined as part of this study and it highlights the treatment effects on the Child Abuse and Neglect Battery. Only treatment effects that were statistically significant are included in Table 2 and, in keeping with conventional practice, we identify treatment effects as those that are statistically robust at the .10 level or lower.

Table 2. Treatment Effects on Policy Preferences Controlling for Key Covariates					
Frame Element	Mental Health Interventions	Poverty/Work Supports	Health/Nutrition	Early Child Care	Abuse/Neglect Prevention
Main Effects – Values Frames					
Prosperity	.035**	.036**	.040**		.035**
Ingenuity	.038**	.047**	.068**	.040**	.049**
Future					.027*
Responsible Manager					.034**
Health as Value			.030*		
Vulnerable Child/Fairness					
Secondary Effects – Simplifying Models and Principles					
Environment of Relationships					
Health as Principle					
Toxic Stress - with Health					.025*
Toxic Stress - without Health	.039**		.034**	.030*	.058**
Pay Now/Pay Later – with Health			.034**	.032*	.031*
Pay Now/Pay Later – without Health					
Brain Architecture – with Health					
Brain Architecture – without Health					
Effectiveness Factors					
Continuous Quality Improvement					
Return on Investment				.042**	.033**

* $p \leq .10$; ** $p < .05$; Blank cells indicate non-significant coefficients

As shown in the Table 2, of all of the issue areas examined, policies in the Child Abuse and Neglect Battery were most sensitive to framing. In particular, a much wide variety of Values, Simplifying Models, and Principles proved successful in lifting policy support than in other issue areas – even once we controlled for the effects of demographic and political factors. More specifically, all of the Values we proposed as potential reframes did well in the experimental testing but neither of the two Values included in the study because they are in common use among advocates (Health as a Value or Vulnerable Child) demonstrated statistically significant effects on this battery.

We should also note that, of all of the frame elements, two Values were particularly robust (Prosperity and Ingenuity) in terms of lifting almost all policy batteries. As such, reframing the issues of child abuse and neglect using either of these frames is likely to have the impact of simultaneously lifting up other related areas of child development and well-being. In other

words, the selection of either of these frames could represent a considerable opportunity for child advocates to successfully connect the policy proposals related to the issue of child abuse and neglect with those related to child development more generally. To the extent that a rising tide lifts all boats, several frame elements seem especially ripe for catalyzing such a tide.

It is also interesting to note that two Values (Future and Responsible Manager) were shown to have an impact on the Child Abuse and Neglect Battery (elevating levels of policy support by about 3 percent) even though they had no affect on any other issue areas. This seems to reflect the extent to which the public sees child abuse and neglect as social issues that sharply diminish the later prospects of young children and their sense that government has a responsibility to continually improve its handling of these matters.

Four other frame elements were shown to have a significant impact on raising policy support for policies in the Child Abuse and Neglect Battery – Toxic Stress (with and without health information attached), Pay Now/Pay Later (with health information attached) and Return on Investment. The magnitude of the treatment effects ranged from about 2 to 6 percent when respondents were exposed to these secondary frame elements.

In terms of the health related frames, it is important to note that the experimental design reflects questions that arise from the Harvard Center on the Developing Child with respect to the effects of health; the experimental design tested Health as a Value, a Principle, an adjunct to existing Simplifying Models, and as a policy battery. Simply stated, we were interested in the ability of a health message to elevate specific health policies and other less-health related policies. As shown in Table 2, we found that the addition of the health message had mixed effects on frame elements where it was tested and the Child Abuse and Neglect Battery clearly reflects this ambiguity. In the Child Abuse and Neglect Battery, significant treatment effects were found on frame elements where health information was included (Toxic Stress and Pay Now/Pay Later) and where it was excluded (Toxic Stress). More generally, the health message significantly strengthened the effects of Pay Now/Pay Later for 3 of the 6 policy batteries – Abuse/Neglect, Early Care, and Health/Nutrition and it was able to do so by an average treatment effect of 3 percent. Conversely, the addition of the health message to Toxic Stress showed the opposite result such that exclusion of the health message actually strengthened the treatment effect in 4 of 6 tests –and it was able to do so to the tune of about 4 percentage points.

Finally, only one of the Principles tested showed promise - Return on Investment. Return on Investment was able to lift public support in 2 of the 5 policy batteries (Health/Nutrition as well as Child Abuse/ Neglect) by an average effect of 3.5 percentage points.

Policy Salience. As a second set of measurable outcomes of interest, we examined the extent to which the frame elements tested might improve the salience of policies in the Child Abuse and Neglect Battery as well as the broader extent to which our frame elements exerted agenda-setting effects across all policy areas related to children’s development and wellbeing. In practice, we ascertained answers to both these queries by evaluating responses to a question asking respondents to rank the importance of the policy areas discussed in the policy batteries and subsequently by examining all relevant mean differences across and within the treatment and control groups.

Our findings suggest that no one frame element proved sufficiently strong to lift the policy salience of all policy areas. Even so, several frame elements seem especially promising for use in improving the salience of individual policy areas and, in light of this finding, we ascertain the specific frame impacts on the Child Abuse and Neglect Battery. Table 3 summarizes the results from findings from the Child Abuse and Neglect Battery alongside others tested in the experiments.

Table 3. Treatment Effects on Public Policy Salience						
Frame Element	Mental Health Interventions	Education	Poverty/Work Supports	Early Child Care	Health/Nutrition	Child Abuse/Neglect
Main Effects – Values Frames						
Prosperity		.058**	.058*			.058**
Ingenuity						
Future						.062*
Responsible Manager				.042*		
Health as Value						
Vulnerable Child/Fairness			.058*			
Secondary Effects – Simplifying Models and Principles						
Environment of Relationships		.054*	.065**	.051*		
Health as Principle					.045*	
Toxic Stress - with Health		.063**	.052*			
Toxic Stress - without Health						
Pay Now/Pay Later – with Health	.037*					
Pay Now/Pay Later – without Health						.045*
Brain Architecture – with Health						
Brain Architecture – without Health		.043*			.040*	
Effectiveness Factors	-.039* ³					
Continuous Quality Improvement	.042*	.041**				
Return on Investment				.031**	.041*	

* p ≤ .10; **p < .05; Blank cells indicate non-significant coefficients

First and foremost, we find the pattern of significant correlations to be much more scattered on policy salience than in our analysis of policy preferences. Moreover, in the areas where we see significant treatment effects from the frame elements, the magnitude of those effects on policy salience on average tended to be about 4 to 7 percentage points.

With regard to the Child Abuse and Neglect Battery in particular, we find the agenda-setting effects of Prosperity and Future particularly pervasive and consistent with the findings on policy preferences. The treatment effects indicate that Prosperity and Future improve policy salience by about 6 percentage points.

The effectiveness of Pay Now/Pay Later (without Health) in lifting policy salience in the Child Abuse and Neglect Battery is also noted here. More specifically, the treatment effect on Pay Now/Pay Later shows that that this frame lifts policy salience on issues of child abuse and neglect by about 4.5 percentage points.

Support for Public Funding. A third outcome of interest observed as part of these experiments was the willingness of respondents to express support for public funding of the policies for which they indicated support. Since it is certainly plausible that respondents could express general support for a policy but revoke that support when they believe it to require action or resources on their part, we asked some basic questions at the end of the policy batteries that we felt would to speak to these issues. Our ultimate goal in asking this set of separate policy support

questions was to see how our framing elements would fare when respondents had to consider the potential financial costs associated with the policy remedies they expressed support for, as well as when they had to make explicit trade-offs between different funding mechanisms to pay for those remedies. With regard to the latter, we examined whether respondents supported a strong policy response to the children's issues in our policy batteries when they were told that such a response would necessitate one or more of the following funding trade-offs: a higher tax obligation, cuts to other social programs, regulation of the private sector, and/or additional government resources provided to community and nonprofit groups to leverage their ability to address children's development and well-being. In a separate question, we also specifically asked respondents about their support for recent Congressional budget cuts to a host of social programs such as Medicare, child care programs, federal student programs and others.

In terms of our analysis, we focused our analyses on three separate but related aspects of the public funding question: (1) the impact of the frame effects on *whether respondents support any* governmental funding in our policy batteries, (2) the *strength* of any expressed commitment to public funding in these policy areas, and (3) the *types* of public funding most supported by respondents.

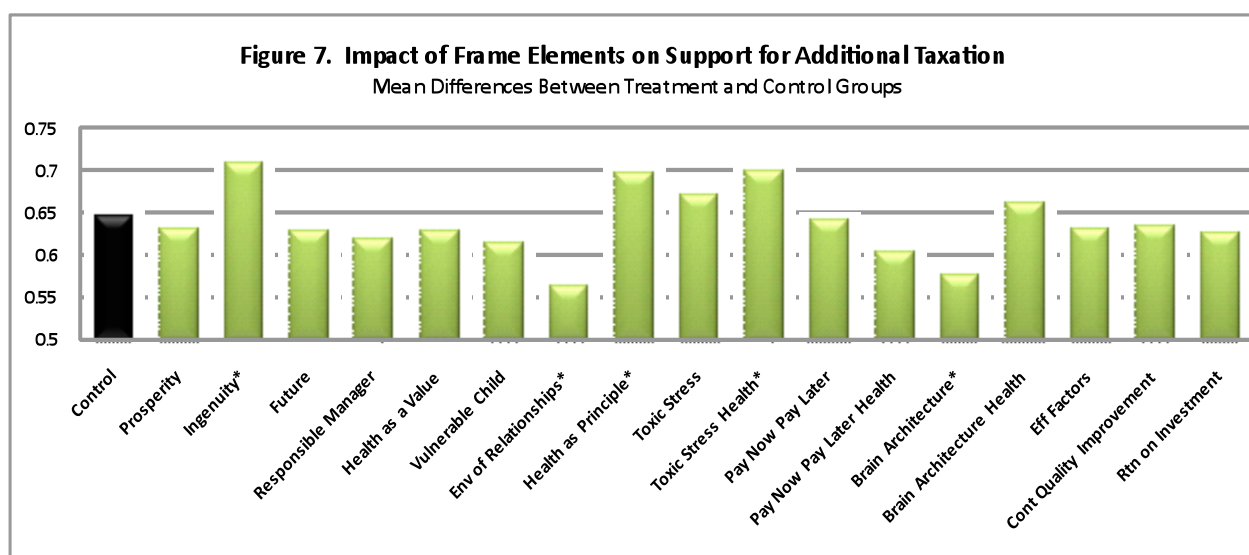
Generally, when we compared the treatment and control group conditions on the first two parts of this inquiry, we found that none of the Values seemed to demonstrate statistically significant results. Two other frame elements (Toxic Stress and Pay Now/Pay Later without health) did prove to have a positive affect on willingness to support public funding, however, and the treatment effects on these two frames were about 3 percent. More simply put, about 3 percent of people exposed to either of these treatments exhibited more willingness to support public funding for policies around children's well-being. For such a brief exposure to the frames, this is a particularly exciting result because we expect the threshold for public funding support to be much higher.

The third component of our analysis (types of funding supported) yielded an even bigger harvest in terms of moving a step closer to understanding the public's appetite for funding policies targeted at children's development and well-being. To begin to examine the impact that our frames have on the types of public funding supported by respondents, we examined our funding trade-off question in more detail.

Basic results from the means tests suggest that, to the extent that respondents supported public funding, most preferred additional taxation to other types of funding and those means proved to be statistically significant. While we intentionally designed the wording of the question on taxation to signify a fairly nominal amount (we asked if they would support an additional \$1 tax obligation), the fact that so many said they would support additional taxes over other methods like cutting other programs, was a bit surprising. Moreover, the fact that they supported taxation as a funding mechanism literally across the board on all policy issues (including the Child Abuse and Neglect Battery) was remarkable.

Figure 7 investigates the taxation finding in a bit more detail; it summarizes the means for all of the frame elements as they relate to support for taxation. Figure 7 presents evidence that several of the frame elements lift support for taxation as a funding mechanism. Although several frame

elements appear to have some effect on the willingness to support additional taxation as a method to fund the policy solutions proposed in the survey, we see particularly salient results on Ingenuity and its ability to elevate support for public taxation is quite noteworthy. We also note that mean differences related to Ingenuity versus the control condition are highly statistically significant. From the vantage point of the Child Abuse and Neglect Battery, this is particularly important as it provides even more evidence of the advantages gained by using Ingenuity as a Value alongside, or in lieu of, other frames to communicate about this issue.



Apart from Ingenuity, we also recognize the influence of health related frames on willingness to support public taxation. In our experiments more generally, we found that health related frames tended to have a major impact on willingness to support public funding for children's policies. We suspect this is because health care as already emerged as a likely focus of new legislative policy and financing, so to the degree that child abuse is related to this issue in the public's consciousness, we should also realize the success of health related frames. This is the case with Figure 7.

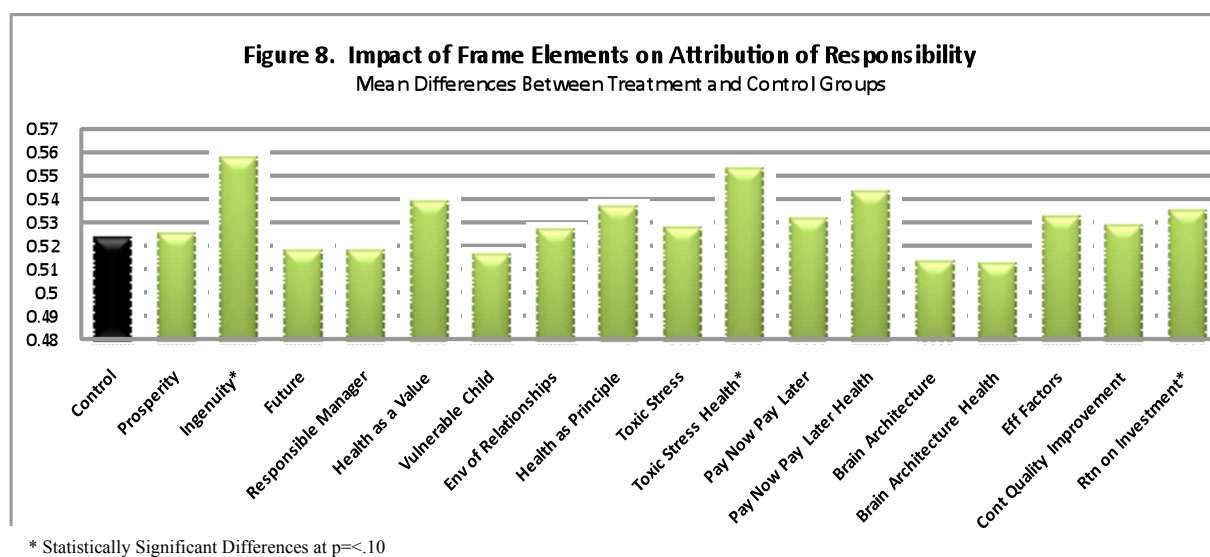
We also note, just in passing that, several of the frame elements – ones that would seem to specifically address financial costs and obligations such as Return on Investment, Pay Now/Pay Later and Prosperity -- proved conspicuously ineffective in relationship to taxation support. At the same time, it is important to recognize that some frame elements – environment of relationships and brain architecture, for example, were not designed for this specific purpose and it is little surprise that they have the effects they do. Moreover, none of the other funding mechanisms (regulation, cuts from existing social programs or government resources to organizations) were significantly related to any of the frame elements.

Attribution of Responsibility. We also asked respondents to convey their attitudes about the role of government in advancing children's development and wellbeing. Their attitudes were assessed from a series of questions on the survey that asked them to consider children's wellbeing and then to locate themselves on a scale of popular viewpoints about the role of

government. Using these questions detailed, we created a summary variable (or what we call, an Attribution of Responsibility Battery) to further evaluate the impact of the frame elements on how respondents see the role of government. This allows us to see the findings in a more cohesive form across the specific frame elements. Explicitly, we want to know if respondents exposed to our frame elements were more likely to assign a larger role to government in addressing the social problems associated with child development and wellbeing than those in the control condition.

Findings reported in Figure 8 summarize the findings from this line of inquiry. Data in Figure 8 suggest that three frame elements were positively and significantly related to support for a more active governmental role: Ingenuity, Toxic Stress with Health, and Return on Investment. We also note that Health as a Principle was close to the level of the significance and therefore, might also be usefully added to the list of promising frame elements that seem to transform how the role of government is conceptualized on children's issues.

Although this line of inquiry does not test the ability of the frames to lift attribution of responsibility specifically with regard to abuse and neglect (as social issues), these analyses provide more evidence about the potential advantage gained by using these three frame elements in communications about children's development and by extension, abuse and neglect related policies.

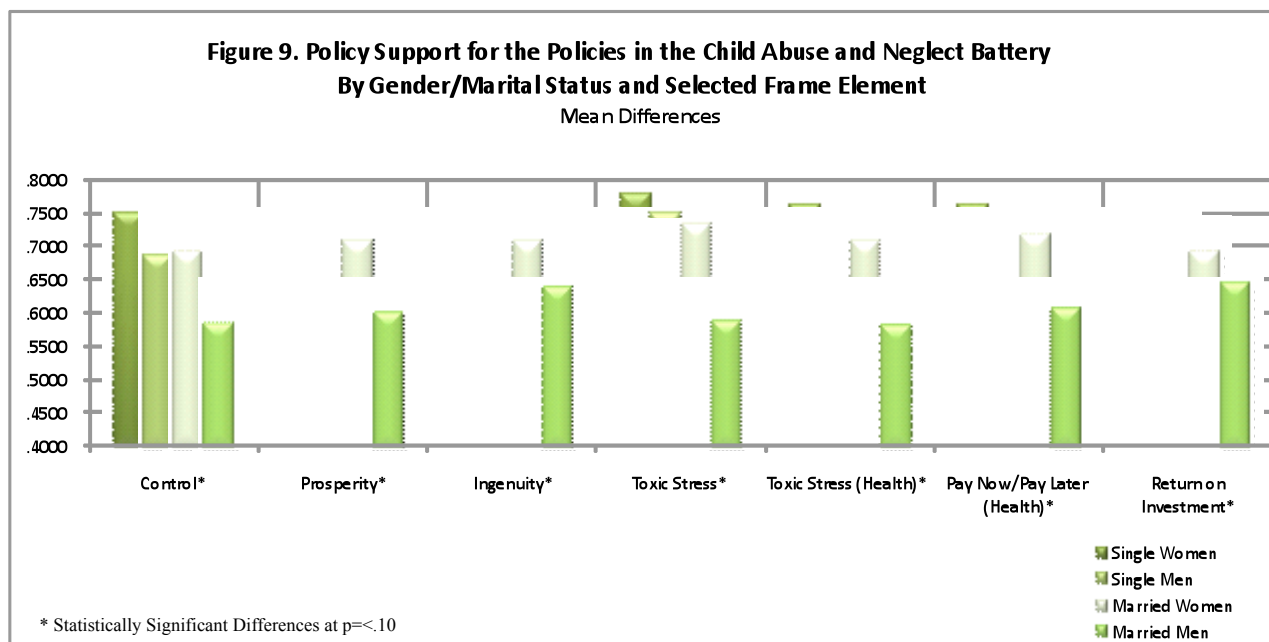


Demographic and Political Factors. In the analyses of four outcomes of interest, we controlled for the impact of a set of key demographic and political factors. In addition to those analyses, we wanted to undertake a line of inquiry that examined these factors in more detail. In particular, we conducted analyses to ascertain how the frame elements performed across race, gender, class and political cleavages. That is, we were interested in the extent to which there were observable and significant differences in the effectiveness of the frame elements across key demographic and political factors. As a result, we conducted additional analyses to decompose the effects of these factors across the most promising frame elements that we found in relationship to the Child Abuse and Neglect Battery: Prosperity, Ingenuity, Toxic Stress (with and without Health), Pay

Now/Pay Later with Health, and Return on Investment. In the analyses that follow, we examine the means across these frame elements in relationship to the following factors: (1) gender and marital status; (2) race and income; and (3) party affiliation and education.

Figure 9 below presents the interaction of gender and marital status as it relates to the Child Abuse and Neglect Battery. The most visible finding from examination of Figure 9 is that, in the control condition, unmarried women tended to have higher levels of support for policies in the Child Abuse and Neglect Battery than all other groups (unmarried men as well as married men and women). Single men and married women tended to have similar levels of policy support for such policies in the control- leaving married men as least likely to support policies in the Child Abuse and Neglect Battery.

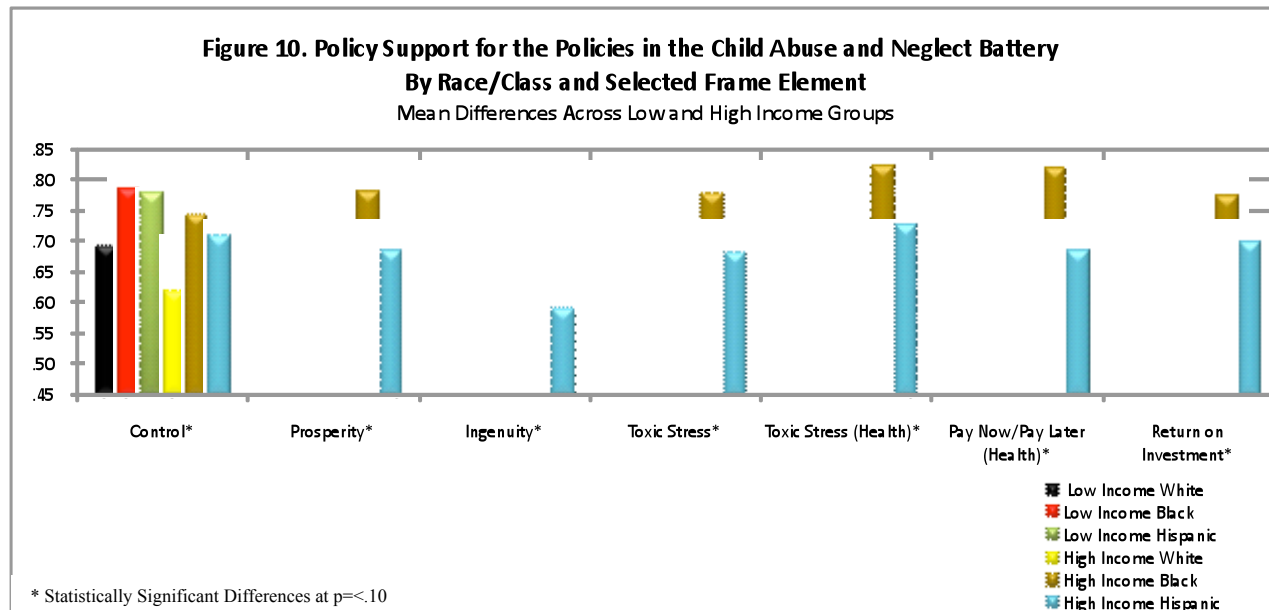
Moreover, the effect of the frame elements we tested seemed to have a mixed impact on the levels of policy support across these groups. After exposure to Ingenuity and Return on Investment, unmarried and married men tended to look more similar in terms of their patterns of policy support (still however, substantially less than that of women overall). Prosperity and Toxic Stress on the other hand led to strong increases in support among married women and, even stronger increases among single men. Although the remainder of the frame elements tended to increase policy support overall, they also tended to mirror cleavages in terms of gender and marital status.



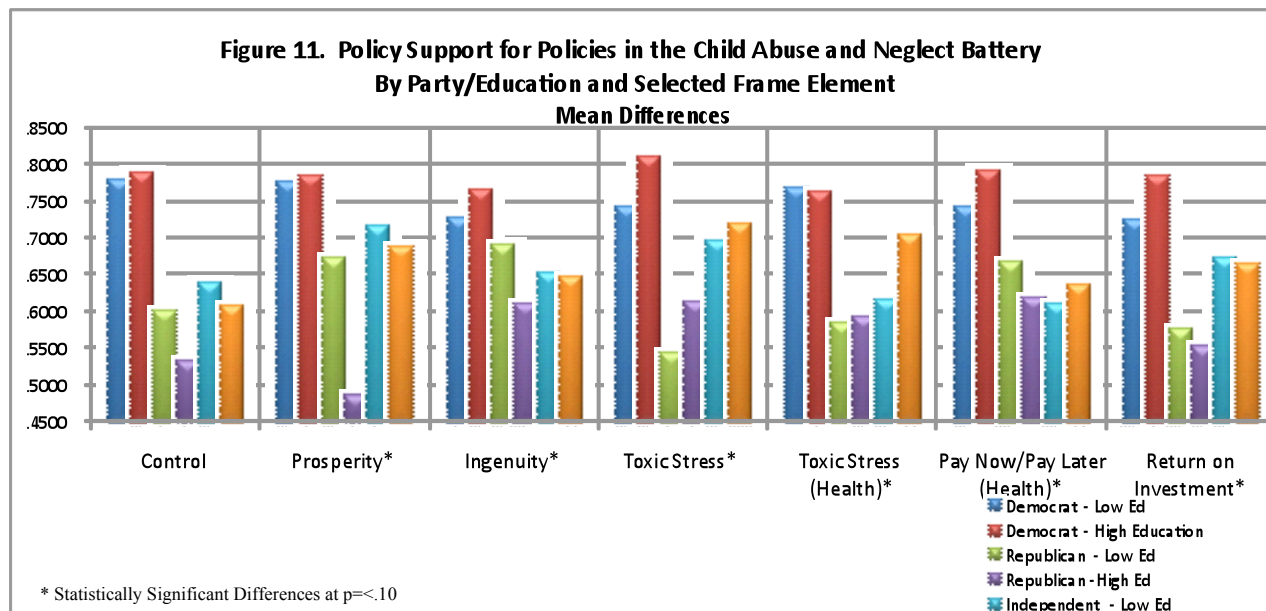
Overall, this suggests to us that both gender and marital status are highly influenced by these frame elements – so much so that respondents seemed to be shaped as much by gender as they were by marital status. As a result, although we can use this data to discuss the relative ways that the frames resonate with different groups, the ability to make broad generalizations about the effects of the frames in terms of gender and marital status is limited.

We also examined the relationship of race and income in terms of public support for the policies in the Child Abuse and Neglect Battery. More than anything, Figure 10 illustrates that, in the control condition (that is, with no framing) members of minority groups (Blacks and Hispanics, in particular) were generally much more likely to support policies that addressed child abuse and neglect, across each of the income groups. Moreover, low-income groups in the control condition were much more likely than higher income groups to support such policies as well (across all racial groups).

The frame elements do some heavy lifting in terms of shaking up this neat pattern in ways that defy easy categorization. The latter suggests that the pattern of relationships on the issue of abuse and neglect is much more difficult to determine because both race and class are simultaneously fluctuating across the frame elements we tested. That is, after exposure to the frame elements, respondents seemed to be shaped just as much by their racial/ethnic identities on the issues of abuse and neglect as they were by their income class.



Finally we examined political party affiliation and level of education. Results from those analyses are found in Figure 11. While the relationships here are equally as complicated, the overriding relationship is a little easier to discern. In this regard, the primary relationship is principally among partisans and secondarily across educational background. That is, Democrats (whether highly educated or not) tended to have much higher levels of support for policies that target child abuse and neglect than other groups. Moreover, levels of support among Republicans and Independents look more similar than different but it is also clear (for the most part) that party affiliation here has a bigger impact than does educational differences among respondents.



SUMMARY AND CONCLUSION

In this report, we were interested in the extent to which a set of carefully selected frame elements could shape how people prioritized and expressed support for policies related to child abuse and neglect. It built upon earlier qualitative research conducted for Prevent Child Abuse America (Footnote CD) that suggested frames associated with early child development had potential to lift support for, and understanding of, child abuse and neglect policies. This particular line of inquiry was taken alongside a larger set of policies that addressed children's development and well-being in further refining the early childhood development core story. In addressing these issues, we set out in this experimental research to evaluate a series of modified Values, Simplifying Models and Principles that compliment components of the existing message. At the same time, in addition to the control, we chose to investigate the effects of a frame common to communications practice – the Vulnerable Child Frame – in order to discern whether its effects, as we suspected, were minimal or negative. This gave us a bit more context and contrast to the effects of the prospective reframes. Finally, we were especially interested to see if, and under what frame conditions, the concept of health could be usefully added to the core story (i.e. as a Value, Principle or addition to an existing Simplifying Model). In the context of the Prevent Child Abuse America-sponsored research, the question of how framing child abuse and neglect in terms of health affects support is particularly germane.

Generally, the findings provide clear and consistent empirical evidence that framing the content of social messages on child abuse and neglect matters a great deal on policy related outcomes. We also find that at least six of the frame elements we tested hold enormous promise for child advocates interested in communicating more effectively about child abuse and neglect: Prosperity, Ingenuity, Toxic Stress (with and without Health), Pay Now/Pay Later Health, and Return on Investment. We also note here that, with respect to the Child Abuse and Neglect Battery, there was more clarity in the findings than in other policy areas, and thus a greater

opportunity to offer even more clarity about the use of the frame elements. In particular, we find that:

- (1) the public is highly sensitive to strategic framing on issues related to child abuse and neglect;
- (2) child abuse and neglect as a social concern seems to cast a much wider net than other policy areas – that is, a much wide range of frames were successful in elevating our four outcome measures of interest (policy salience, support, willingness to support public funding, and to see government as the vehicle for advancing children’s development);
- (3) because so many frames have the effect of lifting support for child abuse and neglect policies, child welfare advocates on this issue have the opportunity to create some synergy across child development issues by using frames that also elevate other areas of child development;
- (4) we found very strong evidence of the effects of partisanship, gender, race, income and marital status on support for policies that address abuse and neglect; and we also found that respondents were shaped: (a) as much by gender as they were by marital status; (b) as much by their racial/ethnic identities as by their income class; but (c) more by party affiliation than by their educational background.

These experiments also give us some indication about the magnitude of the effects of these frame elements. To the extent that they were successful in extending the reach of our outcomes of interest (i.e. policy salience, support, etc...), they typically did so to the tune of about 5 to 10 percent of respondents. While the magnitude of expansion of these outcomes may seem modest at first, this modesty should be tempered by the fact that: (1) exposure to the frame elements as treatments was relatively brief, amounting to a paragraph read immediately before answering policy question, with a subset of varying words in each treatment; (2) rankings of initial salience accorded to child abuse and neglect were already quite high and, as a result, the marginal rate of return on exposure to the frame elements at that level is much lower; and (3) what we know about the origins of individuals’ political agendas and the difficulty of transforming those agendas means that we recognize this effort as a process of long-term rather than short-term exposure.

As a result, we present these result findings as a strong validation of particular frames but more important, we demonstrate that attention to framing (especially in choosing the right frame elements) can broaden the base of support that scientists and child welfare advocates need to successfully pursue policies that attend to protect the well-being of our children.

Finally, we conclude from these experimental data that the recommendations advanced in the qualitative phase of our investigation for Prevent Child Abuse America remain valid with respect to the potential impact of early child development values and related information on policies and programs associated with abuse and neglect.

Appendix I: Values, Simplifying Models, and Principles

After the selection of the frame elements, FrameWorks researchers then developed a narrative paragraph as a representative of how that element might be discussed in a media report or some other form of advocacy materials to which informants might routinely be exposed. Although these narratives may (or may not) represent how they might be presented in practice, each of the frame elements tested reflects FrameWorks' best execution of that idea. The specific narratives that respondents were exposed are listed below. Each respondent in the survey was exposed to one of these narratives unless they were in the control group (where they would receive no exposure to anything except the policy batteries).

Values Frames

1. Prosperity Frame. Lately there has been a lot of talk about the role of society in supporting children. In particular, people have offered various explanations of why it is important to devote societal resources to children at the very earliest stages of life. For example, some people believe that early childhood development is important for community development and economic development. According to this view, skills and capacities that begin developing in early childhood become the basis of a prosperous and sustainable society -- from positive school achievement to work force skills to cooperative and lawful behavior. Have you heard of this explanation of why we should allocate societal assets to young children, because they predict our society's prosperity?

2. Ingenuity Frame. Lately there has been a lot of talk about the role of society in supporting children. In particular, people have offered various explanations of why it is important to devote societal resources to children at the very earliest stages of life. For example, some people believe that society needs to invent and replicate more effective policies and programs for young children. According to this view, innovative states have been able to design high quality programs for children. These programs have solved problems in early childhood development and shown significant long-term improvements for children – but many counties don't have access to these innovations. Have you heard of this explanation of why we should allocate societal resources to creating better solutions for young children?

3. Future/Legacy Frame. Lately there has been a lot of talk about the role of children in society. In particular, people have offered various explanations of why it is important to devote societal resources to children at the very earliest stages of life. For example, some people believe that, because children are our future, we need to give to them now so they can give back to society later. According to this view, society makes an investment in its' own future when it invests in quality early childhood programs because these children will be better able to inherit our institutions and steward our nation. Have you heard of this explanation of why we should allocate societal resources to children as our future?

4. The Responsible Management Frame. Lately there has been a lot of talk about the role of society in supporting children. In particular, people have offered various explanations of why it is important to devote societal resources to children at the very earliest stages of life. For example, some people believe that it is irresponsible to ignore new findings about child development that should be used to improve our health and education systems. According to this view, we now know that important child development happens earlier than previously thought, and that early adversity has life-long effects on learning, behavior, and health. So we need to update our major preventive systems to incorporate this new knowledge about early childhood. Have you heard of this explanation of why we should allocate societal resources to better management of systems affecting young children?

5. Health Frame. Lately there has been a lot of talk about the role of society in supporting children. In particular, people have offered various explanations of why it is important to devote societal resources to children at the very earliest stages of life. For example, some people believe that investments in better

children's health result in economic and health benefits for all of society. According to this view, children's health potential is influenced earlier than we thought because we now know that early adverse experiences can have life-long health consequences. This can affect the health of the heart and immune system, so if society wants to lower health care costs, we should invest in early childhood development. Have you heard of this explanation of why we should allocate societal resources to improve our nation's health through young children?

6. The Vulnerable Child Fairness Frame. Lately there has been a lot of talk about the role of society in supporting children. In particular, people have offered various explanations of why it is important to devote societal resources to children at the very earliest stages of life. For example, some people believe that society needs to invest in programs that help the most vulnerable children whose families struggle to make ends meet. According to this view, one way to level the playing field for children who suffer from poverty and discrimination is to financially support their access to the same high quality early childhood programs that wealthier families can afford. Have you heard of this explanation of why we should allocate societal resources more fairly for vulnerable young children?

Potential Principles of the Core Story

7. Environment of Relationships. Lately there has been a lot of talk about the role of society in supporting children. In particular, people have offered various explanations of why it is important to devote societal resources to children at the very earliest stages of life. For example, some people believe that young children grow up in an environment of relationships that affects all aspects of their development. According to this view, healthy development depends upon the quality and reliability of a child's relationships with adults. The support and interaction of trusted adults shapes a child's brain circuits, and can affect academic performance and interpersonal skills later in life. Have you heard of this explanation of why we should allocate societal resources to provide consistent and stimulating environments for young children?

8. Health as Principle. Lately there has been a lot of talk about the role of society in supporting children. In particular, people have offered various explanations of why it is important to devote societal resources to children at the very earliest stages of life. For example, some people believe that adverse experiences get built into the child's body early in life and can predispose a child to later illness. According to this view, children exposed to early adversity can develop an exaggerated stress response that, over time, weakens their defense system against diseases, from heart disease to diabetes and depression. That exaggerated response may never go away, with lifelong consequences. Have you heard of this explanation of why we should allocate societal resources to preventing long-term health problems in young children?

Simplifying Models and Principles of the Core Story - Impact of Adding Health Information

9. Toxic Stress. Lately there has been a lot of talk about the role of society in supporting children. In particular, people have offered various explanations of why it is important to devote societal resources to children at the very earliest stages of life. For example, some people believe that "toxic stress" in early childhood is associated with such things as extreme poverty, abuse, or severe maternal depression and damages the developing brain. It is important to distinguish among three kinds of stress. We do not need to worry about positive stress (which is short-lived stress, like getting immunized). But toxic stress lasts longer, lacks consistent supportive relationships and leads to lifelong problems in learning, behavior, and both physical and mental health. Please tell us if you have heard this explanation of why we should allocate societal assets to young children.

10. Toxic Stress (with health information, in italics). Lately there has been a lot of talk about the role

of society in supporting children. In particular, people have offered various explanations of why it is important to devote societal resources to children at the very earliest stages of life. For example, some people believe that “toxic stress” in early childhood is associated with such things as extreme poverty, abuse, or severe maternal depression and damages the developing brain. It is important to distinguish among three kinds of stress. We do not need to worry about positive stress (which is short-lived stress, like getting immunized). But toxic stress lasts longer, lacks consistent supportive relationships and leads to lifelong problems in learning, behavior, and both physical and mental health. *Children exposed to toxic stress develop an exaggerated stress response that, over time, weakens their defense system against diseases, from heart disease to diabetes and depression. That exaggerated response never goes away, with lifelong health consequences.* Please tell us if you have heard this explanation of why we should allocate societal assets to young children.

11. Pay Now or Pay Later. Lately there has been a lot of talk about the role of society in supporting children. In particular, people have offered various explanations of why it is important to devote societal resources to children at the very earliest stages of life. For example, some people believe trying to change behavior or build new skills on a foundation of brain circuits that were not wired properly when they were first formed requires more work and is less effective. According to this view, remedial education, clinical treatment, and other professional interventions are more costly and produce less desirable outcomes than the provision of nurturing, protective relationships and appropriate learning experiences earlier in life. Please tell us if you have heard of this explanation of why we should allocate societal assets to young children.

12. Pay Now or Pay Later (with health information, in italics). Lately there has been a lot of talk about the role of society in supporting children. In particular, people have offered various explanations of why it is important to devote societal resources to children at the very earliest stages of life. For example, some people believe trying to change behavior or build new skills on a foundation of brain circuits that were not wired properly when they were first formed requires more work and is less effective. According to this view, remedial education, clinical treatment, and other professional interventions are more costly and produce less desirable outcomes than the provision of nurturing, protective relationships and appropriate learning experiences earlier in life. *We now know that children who are exposed to serious early stress develop an exaggerated stress response that, over time, weakens their defense system against diseases, from heart disease to diabetes and depression. That exaggerated response never goes away, with costly consequences for them and the society.* Please tell us if you have heard of this explanation of why we should allocate societal assets to young children.

13. Brain Architecture. Lately there has been a lot of talk about the role of society in supporting children. In particular, people have offered various explanations of why it is important to devote societal resources to children at the very earliest stages of life. For example, some people believe that the basic architecture of the brain is constructed through an interactive process with early experiences. Like the construction of a home, the architecture of the developing brain begins with laying the foundation, and continues with the incorporation of distinctive features that enable increasingly complex skills over time. As it emerges, the quality of that “brain architecture” establishes either a sturdy or a fragile foundation for all of the development, behavior, and health that follows. Please tell us if you have heard this explanation of why we should allocate societal assets to young children.

14. Brain Architecture (with health information, in italics). Lately there has been a lot of talk about the role of society in supporting children. In particular, people have offered various explanations of why it is important to devote societal resources to children at the very earliest stages of life. For example, some people believe that *the basic* architecture of the brain is constructed through an interactive process with early experiences. Like the construction of a home, the architecture of the developing brain begins with laying the foundation, and continues with the incorporation of distinctive features that enable

increasingly complex skills over time. As it emerges, the quality of that “brain architecture” establishes either a sturdy or a fragile foundation for all of the development, behavior, and health that follows. *Early child experiences also get built into the body. Children exposed to serious early stress develop an exaggerated stress response that, over time, weakens their defense system against diseases, from heart disease to diabetes and depression. That exaggerated response creates a weakened foundation for health and has lifelong consequences.* Please tell us if you have heard this explanation of why we should allocate societal assets to young children.

Promising Explanations from Forum Literature

15. Effectiveness Factors. Lately there has been a lot of talk about the role of society in supporting children. In particular, people have offered various explanations of why it is important to devote societal resources to children at the very earliest stages of life. For example, some people believe that we can measure “effectiveness factors” that often make the difference between programs that work and those that don’t work to support children’s healthy development. For 3 and 4 year olds, these would include the level of teacher training, a language-rich environment, and a safe and regulated place that supports a variety of learning experiences. Without these effectiveness factors, some children can spend just as many hours in a program, but not show many positive outcomes. Please tell us if you have heard this explanation of why we should identify effectiveness factors when we allocate societal assets to young children.

16. Continuous Quality Improvement. Lately there has been a lot of talk about the role of society in supporting children. In particular, people have offered various explanations of why it is important to devote societal resources to children at the very earliest stages of life. For example, some people believe that we need to use principles from business, like continuous quality improvement, to strengthen programs for young children. According to this view, we should hold programs accountable to what we know works for children by using objective data repeatedly to analyze and continually improve important processes. Many children’s programs are seldom evaluated. The result is that some children can spend just as many hours in a program, using outdated methods, and not show the positive outcomes that other programs exhibit. Please tell us if you have heard this explanation of why we should allocate societal assets to repeatedly evaluating programs for young children.

17. Return on Investment. Lately there has been a lot of talk about the role of society in supporting children. In particular, people have offered various explanations of why it is important to devote societal resources to children at the very earliest stages of life. For example, some people believe that we need to use principles from business, like return on investment, to make smart investments for society. According to this view, we can evaluate the efficiency of programs for young children by comparing the benefit of the investment to the cost. This allows a reliable comparison between programs that don’t improve child development and those that show real results. Many early childhood programs are seldom evaluated according to their benefits to the child and the society. Please tell us if you have heard this explanation of why we should allocate societal assets to calculating the return on investment in programs for young children.

About the Institute

About *FrameWorks Institute*: The *FrameWorks Institute* is an independent nonprofit organization founded in 1999 to advance science-based communications research and practice. The Institute conducts original, multi-method research to identify the communications strategies that will advance public understanding of social problems and improve public support for remedial policies. The Institute’s work also includes teaching the nonprofit sector how to apply these science-based communications strategies in their work for social change. The Institute publishes its research and recommendations, as well as toolkits and other products for the nonprofit sector at www.frameworksinstitute.org.

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Tiffany Manuel (2009). *Framing Child Abuse and Neglect: Effects of Early Childhood Development Experimental Research*. Washington, DC: *FrameWorks Institute*.

¹ More specifically, 220 respondents were randomly assigned to each of the 17 treatments and 420 to the control group.

² The other policy batteries used in the experiments are: (1) mental health, (2) poverty and work supports, (3) health, and (4) early education and care for children.

³ We specifically made use of the national web-based surveys conducted by Polimetrix at Stanford University. Polimetrix requires its two million panelists to participate in weekly studies in exchange for free Internet access. A two-stage sampling procedure is utilized to create a “matched” sample. First, a conventional random sample is drawn utilizing a RDD sampling frame. At the second stage Polimetrix mirrors the conventional sample by selecting panelists who most closely resemble each member of the random sample.

⁴ Data in Table 1 are not weighted so that the raw characteristics of the sample can be appreciated. However, in the analyses that follow, the data are weighted by the appropriate sample weights.

⁵ The findings on Effectiveness Factors contradict the last round of experimental data and we suspect this may be a function of the way in we revised this treatment to fit the purposes of this current phase of research. Because of the disparate findings, we will take this concept up again in the next round of testing and decouple the name “effectiveness factors” from the concept that it represents. We believe that this might clarify the results on this concept.