

UNITED STATES DISTRICT COURT  
EASTERN DISTRICT OF MICHIGAN  
SOUTHERN DIVISION

**APRIL DEBOER, ET AL.,**

Plaintiffs,

v.

**HONORABLE BERNARD A. FRIEDMAN**

**No. 12=1-285**

**RICHARD SNYDER, ET AL.,**

Defendants.

\_\_\_\_\_ /

**BENCH TRIAL**

**Tuesday, March 4, 2014**

Appearances:

FOR THE PLAINTIFFS:

CAROLE M. STANYAR, ESQ.  
DANA M. NESSEL, ESQ.  
KENNETH MOGILL, ESQ.  
ROBERT SEDLER, ESQ.  
VICKIE HENRY, ESQ.

FOR THE DEFENDANTS:

TONYA C. JETER, ESQ.  
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ANDREA J. JOHNSON, ESQ.  
MICHAEL L. PITT, ESQ.

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*Bench Trial*  
*Tuesday, March 4, 2014*

**I N D E X**

- - -

| <u>Defendant's Case in Chief</u>            | <u>Page</u> | <u>Vol.</u> |
|---------------------------------------------|-------------|-------------|
| <b>Joseph Price, Ph.D.</b>                  |             |             |
| Direct Examination By Ms. Brya:             | 7           | 1           |
| Voir Dire Examination By Ms. Nessel:        | 35          | 1           |
| Direct Examination (Continuing) By Ms. Brya | 47          | 1           |
| Cross-Examination By Ms. Nessel:            | 109         | 1           |
| Certification of Reporter .....             | 150         |             |

1 Detroit, Michigan  
2 Tuesday, March 4, 2014  
3 1:00 P.m.

4 - - -

5 **THE COURT:** You may be seated. Thank you.  
6 Judge Cohn called and said he had thirty students and they  
7 were going come down on from where they are, or who they  
8 are, I don't have any idea. But so we will start. When  
9 they get in, we may take a second to see who they are.  
10 It's always -- since they are in a group -- I don't know  
11 if they are young, old, I have no idea. Okay. Why don't  
12 we have the next witness and we will start.

13 **MS. NESSEL:** May I address --

14 **THE COURT:** Yes. Hold on for a second. Go  
15 on.

16 **MS. NESSEL:** Your Honor, over the lunch  
17 break, I was viewing the power point presentation that the  
18 state defendants intend to present in conjunction with  
19 Joseph Price's testimony. There were a number of slides  
20 that were included in here that don't seem to reflect  
21 anything at all that appeared in this witness's expert  
22 report. And the slides are not numbered, but I can give  
23 you the title.

24 **THE COURT:** Well, I think the way to handle  
25 that is because I have never it and I don't know anything

1     about it, is to deal with it as it comes up. I can't deal  
2     with it in the abstract. I have not read this particular  
3     witness's report because I don't think it was part of  
4     anything that I wouldn't have read before. And so as it  
5     comes up, feel free tree to stand up and to object or to  
6     not object as you see fit.

7                   **MS. NESSEL:** I will. Very good, your Honor.

8                                 -   -   -

9                   **JOSEPH PRICE, PH.D.,**

10                   being first duly sworn by the Court to tell  
11                   the truth, was examined and testified upon  
12                   their oath as follows:

13                   **THE COURT:** You may be seated. Speak into  
14                   the microphone and look at whoever is asking the questions  
15                   and everybody can see your face and hear you.

16                   **THE WITNESS:** Thank you.

17                   **THE COURT:** You may proceed. Marshal, how  
18                   are you today? I haven't seen you in so long. When you  
19                   come in, I appreciate it. This is our United States  
20                   Marshal, Robert Grubbs. So we appreciate it. I have not  
21                   seen you in so long. I stopped up the other day and you  
22                   were busy. It's always good. Usually I won't call you  
23                   out. And sometimes Barbara will come or somebody. I  
24                   usually don't do it. But it's good to see you.

25                                 -   -   -

**DIRECT EXAMINATION**

1

2 **BY MS. BRYA:**

3 **Q.** Can you please state your name and spell it for the  
4 record?

5 **A.** Yes. My name is Joseph Price, J-o-s-e-p-h,  
6 P-r-i-c-e.

7 **Q.** Doctor Price, can you please tell the Court a little  
8 bit of your educational background?

9 **A.** Sure. So I received my bachelor's in economics from  
10 Brigham Young University. Immediately after that I  
11 attended graduate school at Cornell university. I  
12 received a Ph.D. in economics there. I worked Ron Yarbor  
13 (ph) who is an expert on the economics of education. I  
14 also worked with Liz Peters who is an expert on the  
15 economics of the family. So this nice combination of both  
16 education and the family are two of the kinds of  
17 contributing factors to child outcomes.

18 And so, it's, you know, a nice set of training  
19 for this particular case. I was also very lucky to be at  
20 Cornell at a time when they ran conferences related to  
21 fatherhood and conferences related to marriage. I was able  
22 to interact as a graduate student with some of the leading  
23 scholars in some of those fields. And also, because of my  
24 work with Liz Peters, I was able to attend a Witherspoon  
25 Institute sponsored conference at Princeton that dealt

*12=1-285; April Deboer, et al. v. Richard Snyder, et al.*

1 with issues of the family that brought together some of  
2 the leading scholars on the family that I was able to be  
3 involved with.

4 **THE COURT:** If you can talk to the attorney,  
5 I can listen. Then everybody else can see your face.  
6 Thank you.

7 **BY MS. BRYA:**

8 **Q.** You indicated that you received a Ph.D. in economics  
9 from Cornell, is that correct?

10 **A.** That is correct.

11 **Q.** And did you have a particular emphasis, particular  
12 focus with your Ph.D. program?

13 **A.** Yes. So the topic of my dissertation was titled  
14 Economics Of The Family. The first chapter dealt with, it  
15 dealt with birth order differences and how much time  
16 parents spent with their children.

17 **THE COURT:** Can everybody hear? No. There  
18 you go. Make sure you tell you, remember? We had a deal.  
19 If you can't hear, let us know.

20 **A.** So the three chapters my dissertation dealt with  
21 Parental Time Investments In Children -- the three  
22 chapters of my dissertation dealt with Parental  
23 Investments In Children, Marriage, And Student Outcomes  
24 And Gender Difference In Competitive Settings.

25 **Q.** Thank you. That's perfect. I think that is a good

1     pace. So continue like that and I will try to do the same  
2     thing so we all can make sure the court reporter gets it  
3     all down.

4             Can you tell me what your current occupation is?

5     **A.** Sure. I am --

6             **THE COURT:** When did you get your Ph.D?

7             **THE WITNESS:** I got it in 2007.

8             **THE COURT:** Thank you. You may proceed.

9     **A.** So I'm an empirical economist. Sometimes within  
10    economics we would refer to this as applied  
11    microeconomics. I work on topics related to health, labor  
12    and the family. In particular, as an applied economist or  
13    empirical economist we work primarily with large data  
14    sets. We employ rigorous empirical methods, put emphasis  
15    on robustness checks, falsification tests, placebo tests.  
16    And we also have a norm within our field to conduct  
17    research as transparently as possible. We make our code  
18    available to each other. We share our data. We  
19    collaborate. So I find to be a very open scholarly  
20    community.

21    **Q.** And can you give the Court an overview of your  
22    employment history, please?

23    **A.** Yes, I graduated from Cornell in 2007. And I  
24    immediately took a position as an Assistant Professor of  
25    Economics at Brigham Young University. I had been an

1 Assistant Professor for six years and received tenure last  
2 summer. So now I am an associate Professor Of Economics.

3 **Q.** And what are your job duties as an Associate  
4 Professor of Economics?

5 **A.** So my job duties are split between teaching,  
6 research and citizenship. And of these three, research  
7 constitutes the majority of my time. Within that area of  
8 research I advise lots of students. I had about, over 300  
9 research assistants. And so within that role I have a key  
10 role in mentoring future scholars, training them in  
11 empirical methods and within the area of citizenship.  
12 This would be citizenship both at the university by  
13 serving on committees, but it's also citizenship to the  
14 larger academic community by reviewing the work of other  
15 scholars or serving as an editor on a journal.

16 **Q.** Are you affiliated with any organizations?

17 **A.** Yes. I have three affiliations outside of Brigham  
18 Young University. The first is I'm a Faculty Research  
19 Fellow at the National Bureau Of Economic Research,  
20 referred to as the NBER. This is a rather prestigious  
21 affiliation to have within economics. There is a  
22 nomination process each year in which members of the  
23 organization nominate promising young scholars. I was  
24 nominated a few years ago and as part of that affiliation  
25 I attend their conferences two or three times year. I can

1 submit my working papers through their working paper  
2 series which are disseminated to do libraries all around  
3 the world.

4 And I'm part of the children's program which is  
5 a subset of the MBR that focuses particularly on child  
6 outcomes. It looks at the affect of family, education,  
7 public health, on important child outcomes.

8 **Q.** Do you have any other affiliations with the  
9 organization?

10 **A.** Yes. Another group I'm affiliated with is IZA. It's  
11 a German organization. It's one of the premier  
12 organizations for the labor economics. It's located in  
13 Bonn, Germany. It's very similar to the MBR in that there  
14 is a nomination process each year. It's rather  
15 prestigious to be nominated to be a member of this  
16 organization. It has several privileges of allowing you  
17 to travel to Germany to show your work, participate in  
18 conferences. But, again, it's, you know, it's again a  
19 rather prestigious distinction among those of us that do  
20 applied microeconomics.

21 And the third affiliation is with the Austin  
22 Institute. This is a relatively newer organization. And  
23 the only thing that I really have done with the Austin  
24 Institute so far is to write a blog post. Their hope for  
25 the Fellows is to be able to take academic studies, either

1 done by us or others that might not be written in a way  
2 that's accessible to the public and to try to translate  
3 that research into the kind of writing that any educated  
4 person would find accessible.

5 So the only blog post I have done at this point  
6 was actually about the agricultural groups of gender  
7 roles. So we see quite -- there is quite different gender  
8 roles across different countries in the world. And part  
9 of this stems from the way agriculture was conducted  
10 hundreds of years ago.

11 So in some societies the way the terrain was set  
12 up is you would conduct your farming using a plow and in  
13 these societies --

14 **MS. NESSEL:** Your Honor, I'm going to object  
15 to the narrative style. I don't think there is any  
16 question that is directly being posed and yet the witness,  
17 I think just on his own --

18 **THE COURT:** I will overrule. We are just  
19 laying the foundation. It would take a lot less time by  
20 allowing that. That's okay, Doctor. Take your time.  
21 Generally, an examination like this is question and answer  
22 but I think it would take too much time. You may proceed.

23 **A.** So the blog post is just showing that these -- so in  
24 a plow society the men tend to work in the field and it  
25 creates a gender specialization so the women work in the

1 household. Whereas in societies where you need to hand  
2 plant the crops, both the men and women work together in  
3 the field and as a result they both work together in the  
4 household. And what's intriguing about this article is  
5 they show that these agricultural matters that occurred  
6 hundreds of years ago that are no longer relevant continue  
7 to affect the gender roles in society today. So that  
8 would just be an example of the kind of role I have at  
9 Austin Institute --

10 **THE COURT:** You are used to lecturing.  
11 Students can't tell you that. I need one of you in my  
12 classroom.

13 **A.** Yes. So my role would be to translate. In this  
14 case the paper was actually rather technical. My role was  
15 to convert it into something that, you know, the general  
16 public could access and understand.

17 **Q.** Thank you. We talked a little bit about your  
18 experience and your job duties as an Associate Professor  
19 of Economics at Brigham Young. Can you tell me, do you  
20 currently teach any courses?

21 **A.** Yes. So, I mean, I have been lucky at Brigham Young  
22 University that my role is in teaching has been rather  
23 minor. I taught the same class over and over again. But  
24 I teach a class in microeconomics. And I teach a class in  
25 behavioral economics.

1       **Q.** And I think you alluded to do this before. Do you  
2       conduct any research in your position as Associate  
3       Professor?

4       **A.** Yes. That's actually what constitutes the majority  
5       of my time. I run a research team. I have a large group  
6       of research assistants that work for me. My primary areas  
7       of research are economics of the family. But I have had a  
8       string of research related to topics that come out of  
9       racial bias or the response to medical research. But if I  
10      had to characterize the bulk of my research it would  
11      issues related to the family including child outcomes,  
12      union formation, parental investments in children. That  
13      was what my dissertation work was on. And that was the  
14      topics I found most interesting.

15      **Q.** And does your research have any common themes?

16      **A.** Yes. So if I were to think about some of the  
17      commonalities across the research I do, this is all  
18      research using large representative data sets. This is  
19      all research using what we would think of as the most  
20      rigorous empirical methods possible. And it's also  
21      research in which replication is incredibly important.  
22      And as such, I conduct research that can be replicated and  
23      extended by other scholars so we can build off each  
24      other's work.

25                   **THE COURT:** Excuse me, one second. Come on

1 in. I understand there are some students. Come on in.  
2 There is plenty of room. Do you have a commonality  
3 between all of the students. Is there somebody that  
4 is --Who are you?

5 **A SPECTATOR:** I am on the diversity  
6 committee. We are getting the students to tour the  
7 courthouse and sit in on proceedings.

8 **THE COURT:** Explain to them what this case is  
9 about.

10 **A SPECTATOR:** This is the case at trial where  
11 the gay marriage and I think it's also adoption --

12 **THE COURT:** That's good. Okay. I don't want  
13 to go into it, but it's basically the plaintiffs are  
14 challenging the constitutionality of the Michigan  
15 Amendment banning same sex marriage, for lack of another  
16 word. So that's basically what it's about. You are all  
17 law students so I think you will pick it up pretty well.  
18 Right now we have on the stand Doctor Price. And as you  
19 know, in order to testify for those that are going to be  
20 lawyers, in order to testify as an expert, the person that  
21 calls that witness has to qualify them. So, now Doctor  
22 Price is going through his credentials and so forth to  
23 qualify. And I don't know exactly what he is going  
24 testify to, but we will hear it soon.

25 Feel free to leave whenever you have to. I

1 suspect you are from different law schools. How many are  
2 from Michigan State? There we go. Okay. How many from  
3 UD? Okay. How many from Cooley? How many from Michigan?.  
4 Okay. That's all we have. We used to have another one  
5 that went to Florida. We don't talk about him anymore.  
6 Good. Well, okay. Wayne State. I forgot about Wayne  
7 State. How many from Wayne?

8 **A SPECTATOR:** We don't have anyone from  
9 Wayne.

10 **THE COURT:** See. I lucked out today, didn't  
11 I? We have a couple students right over here. We have one  
12 from Michigan State and we have one from Wayne. And my  
13 two law clerks, one sitting in the back there who went to  
14 University of Michigan and one sitting over here who went  
15 to St. John's in New York. So, and the rest attorneys.  
16 When we take a break, you are more than welcome to talk to  
17 the attorneys. We have great attorneys on both sides.  
18 You will see something in this case that is most  
19 important. If you go all through law school and come to  
20 court and you talk to anybody, the most important thing  
21 when you get out to practice law is collegiality between  
22 the profession. And we are losing it. And we are getting  
23 it back.

24 This case is a textbook case of the kind of way  
25 cases should be tried. It's unbelievable. So, not

1 unbelievable. It's the way it should be done and it's  
2 been done a 100 percent in this case. Remember that from  
3 day one, you know. You're attorneys and you can't take --  
4 that's what you are there for. You are the buffer between  
5 the courts and your client and so forth. And collegiality  
6 and civility and reputation. From day one, you better do  
7 the right thing because whatever happens when you first  
8 start, that is your reputation. From then and you try to  
9 change it and do whatever, that is your reputation. Those  
10 are my couple of words. I'm sure Judge Cohn will give you  
11 a couple, too. He's never without some advice. You may  
12 continue.

13 **MS. BRYA:** Thank you, your Honor.

14 **BY MS. BRYA:**

15 **Q.** Doctor Price, before the brief break, we were  
16 speaking, you were speaking about the commonality in your  
17 research. I don't know. Or the common theme in your  
18 research. Did you have an opportunity to fully answer  
19 that question?

20 **A.** Yes.

21 **Q.** Okay. Have you published any peer reviewed  
22 articles?

23 **A.** Yes. So, the vast majority of my articles are  
24 published in peer review journals. The peer process  
25 allows us to have other scholars check our work. It

1 improves the work and so the majority of my papers were  
2 published in peer review journals.

3 **Q.** Can you tell me approximately how many peer review  
4 articles you have published?

5 **A.** Sure. So I have 23 articles that have been  
6 published in print. I have another nine articles that  
7 have been -- gone through the peer review process, been  
8 accepted by the journals and are just waiting to come out  
9 in print.

10 **Q.** And what journals are these articles published in?

11 **A.** So, my research has been published in some of the  
12 top journals, both in economics, business, demography.  
13 Within the field of economics, the Quarterly Journal Of  
14 Economics is often viewed as the premier journal within  
15 our field. I have published work there. Within the field  
16 of demography, the Journal of Demography is generally  
17 considered to be the premier journal. I published there  
18 twice. Within business, the Journal Of Management Science  
19 is considered to be one of the top hits in a business  
20 school. And I published there as well.

21 **Q.** Do any of the articles that you have written cover  
22 the topics of marriage or parenting?

23 **A.** Yes.

24 **Q.** Can you tell us a little bit about those articles?

25 **A.** Sure. So I will break them in three categories. I

1 will talk about some articles that speak specifically to  
2 child outcomes, some that speak specifically to union  
3 formation, and then some that speak specifically to  
4 parental time investment. But I also have kind of a  
5 broader set of papers that at school based interventions  
6 to improve child outcomes. And I can speak briefly about  
7 those.

8 **THE COURT:** When you do, move the microphone  
9 a little bit closer just a bit.

10 **MS. BRYA:** I'm remind you to go slow so the  
11 court reporter can get it down.

12 **THE COURT:** Can you hear now? Are you okay?  
13 Everybody back there? Okay. Great.

14 **A.** So the most important paper that I published  
15 relevant to this case is a paper about the outcomes of  
16 children raised by same sex couples compared to other  
17 family structure types. It was published in 2002 in  
18 Demography. It was published with Doug Allen and  
19 Catherine Pakaluk. The paper builds on some very  
20 innovative work that Michael Rosenfeld did.

21 I view his paper as kind of a quantum leap  
22 forward in the methodological approach to same sex couple  
23 presenting literature. What we did is took his paper as a  
24 starting point. We replicated it. We extended it in some  
25 new ways. And those extensions actually led us to some

*12=1-285; April Deboer, et al. v. Richard Snyder, et al.*

1 very striking and different conclusions than the original  
2 paper had.

3 And then other papers related to child outcomes.  
4 I have a paper with Casey Buckles about the effect of  
5 marriage on infant health outcomes. And what we find is  
6 that children born into a married couple have much better  
7 outcomes even right at the start of life -- birth weight,  
8 being born premature. And this gap has actually shrunk  
9 over time. But it has continued to persist over the last  
10 few decades.

11 And then I also have a paper about teenage birth  
12 rates, also an important marker of child outcomes. And in  
13 that case we are looking at the effect of high school  
14 sports and teenage birth rates.

15 Then within the area of union formation, Case  
16 Buckles wrote a paper looking at the repeal of blood test  
17 laws. These were laws that had been historically been  
18 this placed in various states. We tested for syphilis  
19 gonorrhea. And the states have gotten rid of these laws  
20 which you can think of as lowering the barriers or cost of  
21 getting married. You actually see an uptick in marriage  
22 rates in these states. And this uptick is particularly  
23 noticeable in less educated couples, younger couples.

24 I also have some work with Jeff Due (ph) in  
25 which we look at the factors that determine whether or not

1 someone gets married. And we highlight the fact that the  
2 factors that influence the entry into marriage depend on  
3 whether you cohabit before marriage.

4 And I have written a handbook chapter that  
5 documents a lot of public policies or other factors that  
6 influence whether or not people get married.

7 **Q.** Okay.

8 **A.** And the third category would be the effect of  
9 parental time inputs. And so my dissertation chapter was  
10 trying to explain the fact that we have observed really  
11 large birth order differences in child outcomes. So first  
12 born children get higher test scores, more likely to go to  
13 college, less likely to smoke, have a teen pregnancy. And  
14 what I have shown in my dissertation is that an important  
15 explanation for that is that parents spend a lot more time  
16 with the first born child than they do with the second  
17 born child. It's about 3,000 hours. It's about a year  
18 and a half of full-time parenting that the first born  
19 child gets that the second born child doesn't.

20 And so, again, this is, you know, I think an  
21 important contributor to child outcomes. So we have been  
22 using this as a way to try to understand the effects of  
23 parental time investments on child outcomes.

24 **Q.** Are you the editor of any journals, Doctor Price?

25 **A.** Yes. I am the Associate Editor of the Economics Of

1 Education Review.

2 **Q.** And what does it mean to be the Associate Editor?

3 **A.** So I am put in charge of 40 to 60 articles each  
4 year. And I get to determine the fate of those papers.  
5 What that means is I identify potential reviewers, usually  
6 two to three reviewers per article. I send the article to  
7 the two reviewers and ask them to evaluate the article for  
8 me. I take their evaluation, combine it with my own  
9 assessment of the paper and I have to make a decision  
10 whether the paper should be accepted or rejected.

11 So this is an important gatekeeper role in the  
12 profession. It's how we make sure that the good studies  
13 get published and the less good studies don't. And so  
14 it's kind of an honor given to scholars that have an  
15 established publication record.

16 **Q.** How do you get to the editor of this particular  
17 journal?

18 **A.** So you're usually invited by the editor-in-chief of  
19 the journal. In this case, it's Dan Reese who is a  
20 professor at UC Denver.

21 **Q.** Separate and apart from your duties as Associate  
22 Editor of that journal, have you ever been asked to review  
23 any articles for other people?

24 **A.** Yes. So, I have been a professor for about seven  
25 years and during that time I have been asked to review

*12=1-285; April Deboer, et al. v. Richard Snyder, et al.*

1 academic articles for over 40 different journals. These  
2 journals include nearly all of the top journals within  
3 economics but also include the top journals from  
4 sociology, demography, business, pediatrics.

5 And, again, in this role I play that kind of  
6 second role which is an editor will ask me to review a  
7 particular paper and it's my job to provide assessment of  
8 whether this paper should be published or not. And I  
9 provide a number reasons to justify that decision and I  
10 also provide comments that are designed to be helpful to  
11 the authors. And so, I have done this for over 40  
12 different journals. I probably have reviewed over a  
13 hundred different articles and played kind of a key role  
14 in that.

15 Q. I'm going to direct your attention to what's been  
16 marked as the State's Exhibit Eight. Is there a book up  
17 there, Doctor Price, at all?

18 MS. BRYA: May I approach the witness, your  
19 Honor?

20 THE COURT: You may.

21 MS. BRYA: Thank you.

22 BY MS. BRYA:

23 Q. Again, I would like to direct your attention to the  
24 State's Exhibit Eight. It's eight tab in there. Do you  
25 see what I am referring to?

1       **A.** Yes.

2       **Q.** Can you tell me what this document is?

3       **A.** Sure. This document is my Curriculum Vitae. It's  
4 an academic resume. This was my Vitae as of  
5 December 2003. Since that time two other papers have been  
6 accepted. So if you were to go to my website it would be  
7 slightly different. But this is essentially my academic  
8 record.

9       **Q.** Though separate, with the exception of those couple  
10 of articles that you mentioned, this is a true and  
11 accurate copy of your CV?

12       **A.** That's correct.

13               **MS. BRYA:** At this time, I move for the  
14 admission of State's Exhibit Eight.

15               **MS. NESSEL:** No objection.

16               **THE COURT:** It will be received. Exhibit  
17 six.

18               **MS. BRYA:** Thank you, your Honor. Did you say  
19 Exhibit Eight, your Honor?

20               **THE COURT:** Eight? I said six. But it is  
21 eight. I wrote six down by mistake.

22               **MS. BRYA:** Thank you, your Honor.

23 **BY MS. BRYA:**

24       **Q.** Have you received any grants for your work, doctor  
25 Price?

1       **A.** So the grants that I received are listed in my  
2 Curriculum Vitae on page four. And if I had to  
3 characterize these grants, I would split them into three  
4 groups.

5               One group are grants that I received while I was  
6 at Cornell university and these were grants that I  
7 received from Cornell university. There is another set of  
8 grants that I received while at Brigham Young University  
9 from Brigham Young University. And there is another set  
10 of grants that I have been received from Government  
11 agencies or private foundations. And these include grants  
12 from the US department of Agriculture, the Cornell Center  
13 For Behavioral Economics and the Spencer (ph) Foundation.

14               If I were to kind of describe how this works,  
15 those Cornell grants, I would have been -- in every case  
16 there has to be a proposal. There is a competitive  
17 process by which those proposals are compared to the  
18 others submitted and some team has to make a decision on  
19 which proposals to fund.

20               For the Cornell grant I would be competing with  
21 people at Cornell. For the BYU grants, I would be  
22 competing with people from BYU. For the national grants I  
23 would be competing with scholars from all around country.  
24 Collectively, it's over a half million dollars in funding.  
25 This funding has allowed me to employ lots of

1 undergraduate research assistants and conduct meaningful  
2 research, but it's also a strong signal of the regard with  
3 which my research is held in this community. These are  
4 organizations, especially in the case of the Department of  
5 US Agriculture, they started out by giving me a small  
6 amount and we were very successful with that grant. They  
7 gave us a larger amount. We were successful and they gave  
8 us an even larger amount. And I imagine they would  
9 continue to fund my research in the future.

10 **Q.** Are there any other sources of funding that you have  
11 received for your research?

12 **A.** Yes. So on occasion since I have this really  
13 talented and well-trained pool of research assistants, on  
14 occasion I am asked to employ those students to conduct  
15 various types of empirical tasks. So in one recent case  
16 an app developer asked us to evaluate this company's app  
17 by going into an elementary school and actually conducting  
18 a test.

19 So in that case we told the app developer to  
20 write us a check. They wrote the check. The money goes  
21 into a research account and that research account is used  
22 to pay the wages of my research assistants. In other  
23 cases, the monies come from the University of Chicago, the  
24 University of Miami, Australian National University and  
25 also the Witherspoon institute. And in the case of the

1 Witherspoon institute, they are a foundation located in  
2 Princeton, New Jersey.

3 As part of the Perry case, there was a number of  
4 Amicus Briefs that were submitted. Many of these Amicus  
5 Briefs had empirical statements and we used the money from  
6 the Witherspoon Institute to have students verify those  
7 empirical claims by recreating the data and replicating  
8 the numbers of the reports.

9 **Q.** And is that funding source from the Witherspoon  
10 Institute, is that included on your CV?

11 **A.** I included it on my CV earlier. And there's two  
12 reasons that it's not on my CV anymore. One is that as I  
13 was describing the nature of the grants, all of the grants  
14 that are currently listed on my CV have this process by  
15 which you submit a competitive proposal. You are  
16 evaluated against other proposals, whereas all of the  
17 other funding sources that I mentioned like University of  
18 Chicago, University of Miami, Australian National  
19 University, Witherspoon Institute, had a very different  
20 approach to funding. Which is there wasn't competitive  
21 proposal process. It was basically a group writing a  
22 check to my department and the money being used to fund  
23 the wages of research assistants. So I removed it for  
24 that reason, that it didn't fit the same characteristics  
25 of my other grants. But to be totally honest, I removed

1 it because the Witherspoon Institute received some  
2 negative publicity as a result of the research they  
3 funded.

4 **Q.** Have you ever given any presentations?

5 **A.** Yes. So if you look on the second -- well,  
6 basically the last two pages of my Curriculum Vitae, it  
7 lists all the places I have been invited to give  
8 presentations. These include over twenty different  
9 conferences, some of which go to on a regular basis. It  
10 also includes a list of schools where I have been invited  
11 to give presentations including some of the best  
12 departments in the United States. These include  
13 presentations I have given at various countries around the  
14 world. But, again, this is another signal of the degree  
15 to which my research is held in esteem. These are places  
16 that expend a lot of resources bringing scholars out and I  
17 have been one of those scholars.

18 **Q.** I want to talk a little bit about honors and awards  
19 or recognitions you have gotten, you received for your  
20 work. Have you ever received the Wells and Morrow (ph)  
21 Teaching And Learning Faculty Fellowship?

22 **A.** I have. This is an award given to one faculty  
23 member at BYU each year. In my particular case, the  
24 commendation listed that the major motivation for giving  
25 me the award is the amount of mentored research I did at

1     BYU. That's coupled with the high level of research  
2     productivity with actually creating a really large group  
3     of good scholars that have gone to various graduate  
4     schools.

5     **Q.** And what was that particular research for?

6     **A.** It was more broadly my research related to the  
7     economics of the family. Some of that was the research  
8     that I will be testifying to today related to the outcomes  
9     of children raised by same sex parents. But it just  
10    speaks more broadly to a research agenda that includes a  
11    lot of students as part of the research process.

12    **Q.** And did you ever receive the Emmalene B. Wells  
13    Scholarly And Creative Work Grant from the Spencer (ph)  
14    Foundation?

15    **A.** Let me just -- the Emmalene Wells Grant is actually  
16    something given by BYU, but it's an award given to  
17    recognize a young scholar whose had a high level of  
18    research productivity. It's also given based on the  
19    merits of the projects they propose for the future. In  
20    this case, I received the award based on some research we  
21    are going to be doing about gender differences and  
22    cooperative settings. And with this new project we will  
23    be looking at how men and women respond differently in a  
24    cooperative setting.

25                   And then in terms of the Spencer Foundation,

1     this is a rather prestigious -- it's a very competitive  
2     grant to receive. And we will using this to look at  
3     different ways to encourage kids to do better at math. We  
4     will be tapping into both to trying to get them to  
5     practice more math at home but also practice more math at  
6     school.

7       **Q.** Have you ever submitted any expert witness reports  
8     in any cases?

9       **A.** Yes.

10      **Q.** Court cases?

11      **A.** Yes. I submitted an expert report in Utah, Idaho.  
12     These two reports are very similar to each other. It was  
13     documenting some basic descriptive facts of how -- the  
14     nature of families in those two state. And then I  
15     submitted an expert report to the State of Virginia which  
16     was similar to the expert report that I submitted in this  
17     case.

18      **Q.** And have you ever submitted any Amicus Brief in any  
19     court case?

20      **A.** Yes. So I was signatory on an Amicus Brief that was  
21     submitted to the Supreme Court as part of the Perry and  
22     Windsor case, and a very similar Amicus Brief submitted to  
23     some other states as well.

24      **Q.** For purposes of your testimony today what do you  
25     plan to offer opinions on?

1       **A.** Sure. So the main focus of my testimony today will  
2 be about my published study in demography that describes  
3 differences in child outcomes of children raised by same  
4 sex parents and those of other family structure types.  
5 This study builds on the innovative approach of Michael  
6 Rosenfeld.

7               And so as part of that testimony I will be  
8 describing the study that Michael Rosenfeld did which has  
9 some really great strengths and was actually a large leap  
10 forward from the research that occurred before his study.

11              There's a couple ways in which my analysis will  
12 differ from his. And I will provide testimony that shows  
13 that those differences actually lead to very striking and  
14 different conclusions about the data that he was using.

15              I will also provide some supporting evidence  
16 from some other recent studies that use national  
17 representative data. This includes a study by Allen, a  
18 study by Regnerus, a study by Potter. And then within  
19 economics, it's very common to focus primarily on the  
20 differences between outcomes, but at the same time also  
21 provide some reasonable explanations why these differences  
22 are occurring.

23              Even though my testimony will be primarily  
24 focused on documenting the differences and outcomes  
25 between children across different family structure types,

1 I will also talk a little bit about some of the  
2 explanations why that occurs that includes parent gender,  
3 biological relatedness and family stability.

4 Q. Thank you. One additional question with respect to  
5 the case in which you acted as an expert. Have you acted  
6 as an expert in the Bassett case here in Michigan as well?

7 THE COURT: What case?

8 MS. BRYA: Bassett case.

9 A. Yes. I am also -- I'm also an expert in the Bassett  
10 case here this Michigan.

11 BY MS. BRYA:

12 Q. Can you tell me what religion you are, Doctor Price?

13 A. Sure. So I am a member of the Church of Jesus  
14 Christ of Latter Day Saints.

15 Q. And do have you a religious view on same ex  
16 marriage?

17 A. So I do have a personal religious view of same sex  
18 marriage.

19 Q. Can you tell me, do your religious views impact your  
20 research?

21 A. One of the nice things about being an empirical  
22 economist is that the data do all the talking. So as an  
23 empirical economist I follow where the data leads. And I  
24 conduct my studies in a way that they can be replicated  
25 and verified by other scholars. And I also have open and

1 transparent discussions about the tradeoffs that you have  
2 to make when conducting empirical research.

3 **Q.** What methods do you follow or did you follow in  
4 arriving at your opinions that you provided in this case?

5 **A.** Yes. So, one of the decision we made right from the  
6 start because the more -- the more latitude you give  
7 yourself in terms of what you are allowed to do with your  
8 empirical research, the more leeway it gives you to change  
9 the results.

10 So we have decided right from the start we were  
11 going to follow Michael Rosenfeld as closely as possible.  
12 So in this case we are going to use the same outcome  
13 measure, the same control variables, the same empirical  
14 approach. So you can think of this as binding your hands  
15 to the mast.

16 And then what we are going to do, and I will  
17 testify to this today, I will just show you that there is  
18 some really simple extensions you can do to his study, all  
19 of which would be consistent with the standard practices  
20 within economics. And these include, you know, don't  
21 throw observations out of your data set if you don't have  
22 to. And if you do, it's helpful to show the results both  
23 before and after you throw observations out so that the  
24 reader can make a judgment about whether that was an  
25 appropriate decision.

1 I will also speak to the importance of  
2 distinguishing between statistical significance and  
3 economic significance. And this is a case where I think  
4 as an economist we can make a contribution. One of the  
5 key things about economic research is we don't just focus  
6 on whether or not two things are different from each other  
7 but we ask ourselves whether these differences are  
8 meaningful.

9 And this is why even though my research on  
10 professional basketball has no bearing on this case, the  
11 empirical methods that I draw from those studies are very  
12 relevant. Because in that case I'm using very large data  
13 sets. And because I have very large data sets, I would  
14 actually estimate differences that are very precisely  
15 estimated.

16 So in the case of the MBA, the racial bias of  
17 the MBA referees is about 4 percent. And you might ask,  
18 is that a big deal? Because I have so much data I can  
19 actually precisely estimate it's between 3 and 5 percent.

20 And so as an economist we can talk about -- so  
21 it's statistically significant. But it opens the question  
22 of whether it's economically significant.

23 What I will be testifying to today is a  
24 situation where in some cases it's not statistically  
25 significant but it is economically significant. So I

1 think this will be an important contribution. I will be  
2 making the distinction between those two things.

3 **MS. BRYA:** Your Honor, based on Dr. Price's  
4 testimony this afternoon, we request that he be designated  
5 as an expert in the economics of the family.

6 **THE COURT:** Any voir dire or objection?

7 **MS. NESSEL:** Yes, your Honor. Both, please.

8 **THE COURT:** Okay. Do the voir dire first.

9 **MS. NESSEL:** Yes, please.

10 - - -

11 **VOIR DIRE EXAMINATION**

12 **BY MS. NESSEL:**

13 **Q.** Good afternoon, Doctor?

14 **A.** Good afternoon.

15 **Q.** All right. So, Doctor Price, you indicated that you  
16 are here today to offer opinions about the question of  
17 whether children have better outcomes when raised by a  
18 father and mother compared to being raised by two parents  
19 of the same gender, is that correct?

20 **A.** Yes.

21 **Q.** Okay. And in doing so, not only do you intend to  
22 offer statistical data but also you intend to explore the  
23 reasons behind that, correct?

24 **A.** Yes. My answer to that would be the reasons would  
25 be a secondary thing. My primary focus will be on the

1 differences and outcomes.

2 **Q.** But that's not encapsulated, the methods, those are  
3 not encapsulated in numbers, correct? I mean, those are  
4 behavioral features that you would be testifying to,  
5 correct? The gender roles you mentioned?

6 **A.** Actually I didn't specifically speak to gender  
7 roles. I said the parent gender would matter. And all I  
8 will be describing in that case is I will just be pointing  
9 out that fathers parent differently than mothers on the  
10 average.

11 **Q.** That is something that you can find in the data by  
12 statistics as to how they parent?

13 **A.** Yes. So --

14 **THE COURT:** Your examination is to his  
15 qualifications to testify. As to the specifics of what he  
16 testifies to, you may make objections at the time and if  
17 it's beyond his expertise or something else, we can talk  
18 about it.

19 **MS. BRYA:** Your Honor, if I may object. I am  
20 not sure what is being put on the screen, but I would  
21 object to it.

22 **THE WITNESS:** I actually do not know what  
23 that is. It's not coming off my computer.

24 **THE COURT:** No. Somebody else. A lot of  
25 people are connected to the same thing.

1 **BY MS. NESSEL:**

2 **Q.** Sir, you don't have any professional training at all  
3 related to children's development or their well-being.  
4 Right?

5 **A.** I think I was pretty clear that as economists we  
6 study child outcomes. So I guess it would depend on what  
7 you mean by the phrase child development. I wouldn't  
8 consider myself an expert on child development.

9 **Q.** Okay. And you have no professional training in the  
10 field of psychiatry, correct?

11 **A.** That's correct.

12 **Q.** Okay. You are not an expert in psychology either,  
13 are you?

14 **A.** No. I am not a psychologist.

15 **Q.** Okay. Now, you indicated for empirical economists  
16 it's important to use large data sets? It's important to  
17 use large data sets, random sampling, and large sample  
18 sizes in forming your conclusions, correct?

19 **A.** I think those are important characteristics of  
20 research that is going to lead to meaningful statistical  
21 inference.

22 **Q.** But you are not an expert on accepted research  
23 methodologies in the field of psychology, correct?

24 **A.** I am not.

25 **Q.** All right. And you don't have any training on the

1 ways that psychologists think children may be affected by  
2 family structures, correct?

3 **A.** That's correct.

4 **Q.** You have not familiarized yourself at all with the  
5 types of factors that psychologists consider to be  
6 potential mechanisms through which children might be  
7 affected by the family structure?

8 **MS. BRYA:** Your Honor, I am going to object  
9 as it relates to -- I don't think this goes to his  
10 qualifications as an economist.

11 **THE COURT:** Well, to the scope of what he is  
12 going to testify to, so far he said, no. So go on. The  
13 last question.

14 **BY MS. NESSEL:**

15 **Q.** Sir, you have not familiarized yourself with the  
16 types of factors that psychologists consider to be  
17 potential mechanisms through which children might be  
18 affected in the family structure, right?

19 **A.** As I mentioned earlier, I view the mechanisms as a  
20 secondary part of my testimony. I picked three mechanisms  
21 that I think are the type that you could measure in  
22 nationally representative data sets. I imagine that  
23 psychologists have a list of other mechanisms through  
24 which parents affect their children. I wouldn't be clear  
25 about whether this would be available in the kind of data

1 sets that I use.

2 Q. Okay. And you don't know whether in the field of  
3 psychology, for instance, using small convenient samples  
4 is a common and accepted research methodology. Is that  
5 true?

6 A. That's true.

7 Q. Okay. And you have no professional training at all  
8 in the field of sociology, correct?

9 A. So I co-author with sociologists. But I was not --  
10 my Ph.D. training was in economics. There is a lot of  
11 overlap between economics and sociology but I am not a  
12 sociologist.

13 Q. What about social work? Do you have any  
14 professional training at all as a social worker?

15 A. I was not trained as a social worker.

16 Q. And the first paper that you ever published at all  
17 related to same sex parenting was this paper with Douglas  
18 Allen and Catherine Pakaluk, commenting on the Rosenfeld  
19 study. It's a critique of his study, correct?

20 A. That was my first published paper.

21 Q. And that was not until 2012 that that was published,  
22 correct?

23 A. That's correct.

24 Q. And that's your only paper at all that you ever  
25 either authored or co-authored involving children with

1 same sex parties?

2 **A.** For the specific topic of same sex parents, yes.

3 **Q.** Now, in your CV you have numerous publications that  
4 you listed, correct?

5 **A.** That's correct.

6 **Q.** Okay. Seven of those relate to the National  
7 Basketball Association?

8 **A.** Yes.

9 **Q.** So out of the things that you are an expert on, you  
10 are mostly an expert on the MBA, correct?

11 **A.** Actually, that would never be the way I would  
12 characterize myself to others. The MBA research is  
13 research that lends itself well to research mentoring for  
14 students. But if anyone were to ever ask me, are you a  
15 researcher on the MBA, I would always characterize myself  
16 as an applied micro person that does research on health  
17 research and the family.

18 **Q.** But in terms of your publications that's your most  
19 extensive area of knowledge, pertaining to the MBA?

20 **A.** Depends on how -- yeah, but there is a lot of papers  
21 on my Vitae that relates to the MBA.

22 **Q.** And you think that translates to understanding child  
23 outcomes of kids raised by same sex couples?

24 **A.** I think I was pretty clear earlier that the lessons,  
25 the empirical lessons we learn working with large MBA data

1 sets are immediately relevant for the kind of statistical  
2 discussions we will be having in this case.

3 Q. Now, secondary to your MBA related publications, you  
4 write a lot of articles about fruit and vegetables  
5 consumption as well, correct?

6 A. That's correct.

7 Q. And you also write a number articles about  
8 pornography?

9 A. Yes. I put that within the framework of economics  
10 of the family.

11 Q. So, again, out of those 25, just the one that you  
12 co-authored with Douglas Allen and Catherine Pakaluk deals  
13 with the subject you will be testifying about here today?

14 A. It's the most immediately relevant paper on my Vitae  
15 for the case today.

16 Q. Okay. And just to be clear of the difference, you  
17 indicated that you are going to testify, correct, to the  
18 mechanisms that cause -- not just that there are poorer  
19 outcomes for children of same sex couples but also why,  
20 reasons behind that. Is that correct?

21 A. Yes. I did say that was going to be a secondary  
22 form of my testimony.

23 Q. Correct. And, I mean, part of what you will be  
24 discussing, for instance, is Doctor Regnerus' study?

25 A. That's correct.

1       **Q.** And he's a sociologist, right?

2       **A.** Yes.

3       **Q.** Now, in his study he doesn't discuss the whys. He  
4 don't discuss why those poorer outcomes occurred. He just  
5 discusses that they did occur, correct?

6       **A.** I wouldn't know offhand. But I imagine that to be  
7 true.

8       **Q.** But you are going to talk about why, the reasons  
9 behind the poorer outcomes for the children of same sex  
10 couples. That is your intention here today.

11       **A.** I intend to provide some reasonable explanations why  
12 the outcomes differ.

13       **Q.** And in doing so, just so I can understand what is  
14 objectionable on our part and what isn't, you intend to  
15 get into three specific areas that you identify as  
16 mechanisms, right?

17       **A.** That's correct.

18       **Q.** One of those you identify as couple stability.  
19 Right?

20       **A.** That's correct.

21       **Q.** Now, what you know about couples' stability you have  
22 learned from reading a total of four articles about  
23 couples' stability, is that correct?

24       **A.** That's correct.

25       **Q.** That's your expertise in that area, reading four

1 articles?

2 **A.** Right. Well, in addition to reading the articles, I  
3 was actually able to, in the case of Rosenfeld, I was  
4 actually able to use the data myself and conduct my own  
5 independent analysis using his data.

6 **Q.** Okay. How about in terms of what you intend to  
7 testify about in terms of gender roles, what experience do  
8 you have that lends itself to understanding gender roles  
9 as they are applied to same sex couples and their rearage  
10 of families?

11 **A.** To clarify, I don't really phrase it as gender  
12 roles. I phrase it as mothers and fathers parent  
13 differently. And actually my dissertation work on  
14 parental time investment in children, I will be speaking  
15 directly to research I published myself that shows that  
16 fathers and mothers actually parent differently from an  
17 objective standpoint.

18 **Q.** And just to be clear, that study involved the study  
19 of zero same sex couples and zero children raised by same  
20 sex couples, correct?

21 **A.** That study includes -- actually the American Time  
22 Use Survey, it's often referred to as the ATUS, the  
23 A-T-U-S, it does include same sex couples.

24 **Q.** What percentage?

25 **A.** I mean, it's a nationally representative sample. It

1 would be -- I can't remember the exact number. But in my  
2 original study I did not distinguish between same sex  
3 couples and heterosexual couples.

4 Q. So this is another study that you are talking about,  
5 a second study?

6 A. No. All I am saying is in the original Time Use  
7 Study I did, I was looking at fathers and mothers because  
8 in that study you only get the time use of one parent in  
9 the household.

10 Q. It's a study of single parents then, correct?

11 A. So I do look at single parents, yes.

12 Q. And then in the area of biological relatedness, that  
13 mechanism that you intend to testify to, your experience  
14 as it relates to understanding biological relatedness  
15 comes from the fact that you read between five to ten  
16 articles related to biological relatedness, correct?

17 A. Yes. I mean, the other would be my exposure to the  
18 topics while at graduate school at Cornell.

19 Q. Okay.

20 MS. NESSEL: Your Honor that completes my  
21 voir dire.

22 THE COURT: How about your objection?

23 MS. NESSEL: My objection is not to Doctor  
24 Price's --

25 THE COURT: You have to use the microphone.

1 You can use that one, but I'm not sure.

2 **MS. NESSEL:** I don't have an objection to  
3 Doctor Price testifying to a statistical analysis that is  
4 based on numbers. Clearly, this gentleman knows a lot  
5 about numbers. But thinking that involves behavioral  
6 aspects things, things that pertain to sociology,  
7 psychology, psychiatry, involved in these mechanisms that  
8 he's going to discuss, these are not numbers driven type  
9 of arguments that are being made. And I don't think that  
10 Doctor Price is qualified to discuss any of those areas.

11 **MS. BRYA:** Your Honor, I think Doctor Price  
12 has testified that not only is he an empirical economist,  
13 but he specializes in these large data sets. He reviewed  
14 others works more than a hundred times. He has done  
15 numerous publications and numerous studies on his own in  
16 all different topics related to the economics of the  
17 family. And just because he only has one study on the  
18 specific issue of child outcomes related to same sex  
19 marriage isn't indicative of whether or not he is an  
20 expert.

21 For example, plaintiff's witness, Doctor Michael  
22 Rosenfeld, had only one study on this particular topic  
23 but was qualified as an expert. And I believe that Doctor  
24 Price is also qualified to speak to others studies that he  
25 reviewed and documented and replicated in the case of

*12=1-285; April Deboer, et al. v. Richard Snyder, et al.*

1 Doctor Rosenfeld.

2 **THE COURT:** Okay. I think Doctor Price has  
3 established a good case for testifying in the area of  
4 economics of the family and I will allow him to do so.

5 As to the plaintiff's objection as to specific  
6 testimony, I haven't heard it yet. You can make an  
7 objection at that time. I don't know how it fits in. I  
8 don't know how he's going to put it in and so forth. But  
9 I think he's very well qualified to testify in the area  
10 that he has been offered.

11 Now, if he exceeds that qualification and the  
12 plaintiff believes that it's happening, let me know and we  
13 will see how it comes out. I just don't know at this  
14 time. But I think as to what he has been offered for  
15 which is economics of the family, he's qualified.

16 Okay. You may proceed. Counsel.

17 **MS. BRYA:** Your Honor, if I can have a  
18 moment, I need to reset the power point.

19 **THE COURT:** You can set the power point,  
20 whatever you need to do. And they are apparently picking  
21 everything up okay?

22 **THE COURT CLERK:** Yes.

23 **THE COURT:** Okay. Good. So what year -- are  
24 you all in the same year? How many are first year?  
25 Second year? Third year? Good. A lot of student loans.

1

- - -

2

**DIRECT EXAMINATION (Continuing)**

3

**BY MS. BRYA:**

4

5

6

**Q.** Doctor Price, I understand you have a power point presentation today to help talk through some aspects of your testimony, is that correct?

7

**A.** That is correct.

8

9

10

**Q.** Okay. Just feel free to work the slide. If you have any trouble with the machine or if goes to sleep let us know and we can take a break and try to fix it.

11

12

Can you tell the Court about past research on the issue of same sex couples and child outcomes?

13

14

**THE COURT:** Pull the microphone a little closer to you.

15

16

17

18

19

**A.** Yes, I can do that. And this will be a summary of the review of the literature conducted by Michael Rosenfeld, by Doug Allen, Lauren Marks. And so let me just point out some of the limitations that they have highlighted in past research that I completely agree with.

20

21

22

23

24

25

So, one of the first limitations is convenience sampling. So, any time you have a some group of people you are trying to study, it's often difficult to find them through a random sampling method. So what has been historically used in many of the studies is what we would think of as convenience sampling, trying to find people in

*12=1-285; April Deboer, et al. v. Richard Snyder, et al.*

1     whatever way you can. And this also often involves asking  
2     people who you identify for your study to find other  
3     people to be part of your study.

4             Now, one of the challenges about convenience  
5     sampling rather than random sampling is that it's not  
6     clear whether you are actually going to learn something  
7     about the group you care about because you are going to  
8     end up with a group that selected themselves into your  
9     study.

10            For example, in Doug Allen -- Doug Allen's  
11     review, he reviewed 53 studies. He found only four that  
12     included a randomly drawn sample of children. And  
13     actually three of these used the same data set. It's Ad  
14     Health. And the other used some other data set. So  
15     that's one limitation.

16            The another limitation is just small sample  
17     size. In Rosenfeld's paper, he points out quite clearly  
18     that the studies used in past research are too small to  
19     allow for statistically powerful tests. In the studies  
20     that -- he reviewed 45 studies. And the average sample  
21     size was 38 children raised by a gay or lesbian parent.  
22     And I will come back to this issue of what it means to be  
23     statistically powerful. This will really be an important  
24     issue in describing my research and comparing it to  
25     Rosenfeld's. And another limitation that Rosenfeld points

*12=1-285; April Deboer, et al. v. Richard Snyder, et al.*

1 out is that the majority of studies only look at lesbian  
2 parents.

3 **MS. NESSEL:** I will object at this point  
4 because these appear to be psychological studies, but not  
5 economic studies which, of course, Doctor Price is an  
6 expert in economics. But I don't believe any of these  
7 studies are economic studies. They are all psychological  
8 and he also testified he's not familiar with how  
9 psychologists do their work.

10 **THE COURT:** Counsel?

11 **MS. BRYA:** Your Honor, I think Doctor Price  
12 has testified that he has reviewed the research of other  
13 scholars in this area. And he is merely testifying as to  
14 what others have pointed out as some of the limitations in  
15 the past research. He was qualified to do that.

16 **THE COURT:** I will overrule objection. You  
17 may continue.

18 **A.** So of the 45 studies that Rosenfeld looked at, only  
19 seven included gay fathers. And I will show you in a  
20 moment that leaving gay fathers out of the analysis is a  
21 shortcoming. So not all children raised by same sex  
22 couples are being raised by lesbian parents. There are a  
23 number of children being raised without a mother. And so  
24 in order for the analysis to be complete, it's important  
25 to have children that are raised by both gay fathers and

1     lesbian mothers. And Michael Rosenfeld is going to use  
2     the U.S. decennial census to overcome these three  
3     limitations of past research.

4     **Q.** Can you tell the Court a little bit about the  
5     Rosenfeld study, please?

6     **A.** Sure. Let me just pull the slide that describes the  
7     study just a little bit. So Rosenfeld's study was  
8     published in 2010. So Rosenfeld's study was published in  
9     2010 in Demography. This is the premier journal in the  
10    field of demography and it actually has a rather unique  
11    link between economics and sociologists, is that it's  
12    actually a journal that would be considered a top hit for  
13    both a tenured candidate in an economics department and a  
14    tenured candidate in the sociology department.

15             So this case, this would be one of the only  
16    journals where both Michael Rosenfeld and I, if we  
17    published there, we would both be given equal credit in  
18    our departments. So it makes it rather the most important  
19    place for this kind research to be published because it  
20    brings together people from different fields like  
21    sociology and economics.

22             And so Rosenfeld, in setting this paper apart  
23    and highlighting its importance, he uses the first part of  
24    the paper to show, to highlight some of the limitations of  
25    past research. And then he notes quite clearly that his

*12=1-285; April Deboer, et al. v. Richard Snyder, et al.*

1 is the only study in the literature that uses a large  
2 nationally representative data set.

3 Q. We heard some prior testimony that Doctor Rosenfeld  
4 believes his study compliments current research on the  
5 outcomes of children raised by same sex couples. Is this  
6 consistent with the way that he presented his article or  
7 study in 2010?

8 A. If you actually read the way he wrote his paper it's  
9 very clear that he wants to make it known that his study  
10 is making a very important contribution. And,  
11 unfortunately, one of the ways that we do that is by  
12 dismissing the other studies that have come before. And  
13 so he is very quick to point out some of these stark  
14 weaknesses with some of the studies that came before his.  
15 And in that sense I completely agrees with Rosenfeld. His  
16 sample includes 3,502 children raised by same sex couples.  
17 So compare that to the average of the studies that came  
18 before where it was only 38. So with empirical methods we  
19 think of this as like a quantum leap forward in terms of  
20 the ability to detect a statistically significant effect.

21 Q. Can you tell the Court a little bit about the  
22 Rosenfeld study?

23 A. Yes. So let me just direct your attention -- this  
24 is Table One from Rosenfeld's study. One of the things  
25 that I will just point out is these are the different

1 family types that he's using in the paper. So in the  
2 first row it says, heterosexual married. And he puts a  
3 little note in parentheses that says REF. That just means  
4 that is the reference group. So in all of his analyses he  
5 is going to be comparing the other groups listed below to  
6 the reference category which he chose which is  
7 heterosexual married. And I will point out later that  
8 this is an important decision that he made.

9           So some of the other groups he has included in  
10 this table are lesbian cohabiting couples, gay male  
11 cohabiting couples, separated divorced widowed women,  
12 separated divorced widowed men, heterosexual cohabiting,  
13 never married women, never married men.

14           And then in Column A what he's doing is he is  
15 listing the number of children that fall into each these  
16 categories. And so this is where you see right away that  
17 he has 2000 children being raised by lesbian cohabiting  
18 parents. But he also has 1400 children being raised by  
19 gay male cohabiting couples.

20           Now, what he is going to do in a moment in this  
21 analysis is he is going to combine those two groups  
22 together into a single group that he is going call same  
23 sex couples. But I think it's helpful to use this as the  
24 starting point, this first table, because it shows you  
25 that actually leaving gay fathers out of a study isn't an

1 innocuous decision. There is actually a sizeable number  
2 of kids being raised by gay fathers.

3 And then in Column B what he is going to do is  
4 show you the main outcome variable that he is going to  
5 use. And this is whether or not the children are  
6 abnormally old for their grade. So if you are a 11 years  
7 old then you really should be in fifth or sixth grade. If  
8 we observe that you are in fourth grade, then we just  
9 learned that at some point you must have been held back.  
10 And this measure of held back, of being held back in  
11 school is highly correlated with earnings later in life,  
12 educational attainment. It's a marker that something has  
13 not gone well for you. And I will show in a moment that  
14 this measure is only really measured very well for a  
15 couple of age groups. Mostly 11, 12, 15, 16 years old.  
16 And so what Rosenfeld is doing in the last column is --

17 **MS. NESSEL:** Your Honor, I object to any  
18 testimony from this witness regarding teenagers. There  
19 was nothing in any of his expert reports that spoke to the  
20 progress of teenage children.

21 **THE COURT:** He's not -- he's commenting on  
22 Doctor Rosenfeld's report at this point to lay a  
23 foundation, I suspect, for his report. I think he can  
24 proceed?

25 **A.** So in the Column C, all he's doing is he's

1 recognizing that he has some measuring error issues in  
2 Column B. So he wants to scale it into something that  
3 actually is closer to reality. So it's not the case -- so  
4 if you look at that number in the first row, that only 1.7  
5 percent of heterosexual kids have been held back, the  
6 reason that number is so low is we can only observe that  
7 particular measure if the kid is either 11 or 12. What  
8 he's doing is scaling it to reflect grades one through  
9 eight because he is going to multiply that by four and  
10 that is going to reflect about the fraction of kids that  
11 have been held back in school.

12 **Q.** In the 1.7 you were referring to a minute ago,  
13 that's there, and I guess what would be under Column B?  
14 Heterosexual married, 1.70?

15 **A.** That's right. So under Column B, in the first row,  
16 this would be children raised by heterosexual married.  
17 And so 1.7 percent of them in the data set are coded as  
18 having been held back. Since we only measure that,  
19 measure precisely for a few of the grades, he's going to  
20 scale it up by a factor of four.

21 **Q.** Thank you. I think we can move to the next.

22 **THE COURT:** I was going to say something to  
23 the students but we will talk about it later.

24 **MS. BRYA:** If you want to do that now I have  
25 no problem with that.

1                   **THE COURT:** Well, that's okay.

2   **BY MS. BRYA:**

3           **Q.** Thank you, your Honor. Is there anything that, else  
4   that you feel that is significant to point out with  
5   respect to this slide?

6           **A.** No. I mean, this slide naturally leads into the  
7   next slide which is where he actually conducts the real  
8   analysis for his paper. So in this case we are comparing  
9   raw numbers across these different family structure types.  
10   We have not controlled for any of the other  
11   characteristics that might differ, like income or  
12   education or race or age.

13                   **THE COURT:** Doctor Rosenfeld got these  
14   numbers from the census?

15                   **THE WITNESS:** Exactly.

16                   **THE COURT:** Just for our students, so you  
17   know where he got his numbers. Doctor Rosenfeld's  
18   underlying numbers came from the census and he testified  
19   that the census only can track a certain age group and  
20   therefore he equated that. Anyhow, just so you students  
21   know what is going on.

22                   **THE WITNESS:** That is a very good point.

23                   **THE COURT:** They're law students. They  
24   should know a little bit about that.

25                   **THE WITNESS:** I will point out that issue

1 later. You only know, you have grade measured in  
2 categories, not the actual grade that the kid is in.

3 **BY MS. BRYA:**

4 **Q.** Can you go ahead and flip the slide, Doctor Price,  
5 to the next one. Let me see if I can try to get it so  
6 it's not off the screen. This slide is entitled Logistic  
7 Regression Results, correct?

8 **A.** Yes.

9 **Q.** Can you explain for those of us that are aren't  
10 economists what that phrase means?

11 **A.** So I will certainly do my best. This is the kind  
12 table that terrifies my student? But let me just walk you  
13 through how this works.

14 So I mentioned earlier that the children being  
15 raised by heterosexual married parents, they are the  
16 reference group. And you will notice they don't actually  
17 have a number next to them. You will see them up at the  
18 top of the table in the first row where it says Family  
19 Type, and in parentheses, Heterosexual Married. They are  
20 the omitted group. They are the reference category. All  
21 the other numbers reported in each column are relative to  
22 that group.

23 When you look at the second row where it says  
24 Same Sex Couples Cohabit and then you see a negative  
25 co-efficient, all that means is that children being raised

1 by a same sex couple is less likely to be making normal  
2 progress in school. That means they are more likely to  
3 have been held back.

4 And that little asterisk right next to the  
5 number, that is a way that economists and sociologists use  
6 to indicate whether or not that difference is  
7 statistically significant. And so in this table if you  
8 see three asterisks, that means it's statistically  
9 significant at the 1 percent level which is a really kind  
10 of strong form of statistical significance. If you see  
11 two stars, that is at the five percent level which is the  
12 conventional cut-off. And if you see one star, that is at  
13 the 10 percent level. And so even though the conventional  
14 level is 5 percent, we'll often report the 10 percent  
15 level just because for some people that's a reasonable  
16 cut-off. But I think the normal convention within  
17 economics and sociology is to use a 5 percent cut-off.  
18 What you see in the first row, the first column is that --

19 **Q.** This is the column entitled Model One.

20 **A.** Yes, this is the column entitled Model One and Table  
21 Three. All that co-efficient is telling you is that there  
22 is a difference. It's statistically significant at the  
23 10 percent level. But one of the unfortunate ways about  
24 the way this table was created is that number, negative  
25 .267 actually does not have any meaningful interpretation.

1 Like if you were to ask, like if you were to show this  
2 table to any scholar and ask them, can you tell me what  
3 that number means, they wouldn't be able to tell you what  
4 it means. You have to run it through kind of a  
5 complicated formula that none of us can do in our head.

6 Now, the other thing that he doesn't provide  
7 here which is standard practice in most papers is he  
8 hasn't provided either standard errors or a Confidence  
9 Interval. All he's given us is the asterisk that tells us  
10 it's statistically significant at the 10 percent level.  
11 It doesn't give us any idea about what the range of  
12 possible estimates might be. And so I will kind of point  
13 to that in a second when I show our conversion of this  
14 table.

15 **Q.** Can you tell us what the difference between Model  
16 One, Model Two, model Three, Model Four and Model Five,  
17 what that means?

18 **A.** Yes. This is actually very standard practice in an  
19 empirical paper, especially like the first empirical paper  
20 in an area. So he's running that first regression without  
21 any controls. And then as you move across the models to  
22 Model Two, he's adding in some additional controls  
23 regarding income, education, and then as you get to Model  
24 Three, Model Four, and Model Five, he's going to add in  
25 additional controls with each column. So we would think

1 of that as increasing the number of things that we are  
2 trying to make comparable across these family structure  
3 types.

4 Q. Thank you.

5 THE COURT: What is the relevance? What do  
6 you mean when you say 1 percent, 5 percent, 10 percent?  
7 Of what?

8 THE WITNESS: Oh, that is a great question.  
9 So when we say that, that it's significant at the  
10 5 percent level, then that means that if I detect, if I  
11 get a result that says it's significant at the give  
12 percent level there is only a 5 percent chance that there  
13 is actually no difference. So we have this problem that  
14 we are never certain. And so we have -- we pre-commit to  
15 a set of cut-off rules. We are going to say we are  
16 certain if we are at least 5 percent if there is only a  
17 5 percent we are wrong. That's why I said if you use a  
18 10 percent cut-off rule, then you're you being a little  
19 less conservative. You're saying, hey, as long as we are  
20 not 10 percent, as long as there is not a 10 percent we  
21 are wrong, we will be okay with it being the answer. I  
22 think the convention is to use five percent.

23 THE COURT: I've got it.

24 MS. BRYA: Thank you.

25

1 **BY MS. BRYA:**

2 **Q.** Did you do a study Doctor Price based on Doctor  
3 Rosenfeld's study?

4 **A.** Yes. I am actually going to use -- so this is  
5 Rosenfeld's study right here. So we are going to use this  
6 as a starting point because we agree with Michael  
7 Rosenfeld that this is really great data. We agree with  
8 the controls that he including. We agree with the outcome  
9 measure that he is including. There's only two things  
10 that we disagree about. And the one is very innocuous.  
11 It's we disagree with the omitted group that he used.

12 And let me show you why this is important. If I  
13 am looking at this table and you were to ask me, are same  
14 same sex couples different than single mothers? Okay. So  
15 I look at that Model Five. This is his preferred  
16 specification. I would see a number that is a negative  
17 1.42 and then I go to, Never Married Women. This is on  
18 the sixth row, and I see a number that is negative 1.45.  
19 And I ask myself, are those two numbers different from  
20 each other? They are really close to each other. But  
21 without providing standard errors I cannot tell without  
22 going back to the original data whether or not those two  
23 numbers are different from each other.

24 **Q.** When you say standard errors, can you describe what  
25 that means?

1       **A.** So imagine, one way to think about standard error is  
2       imagine the average difference between two groups is  
3       ten-points on a math test. You might be curious, how  
4       precisely are those estimated? If I told that the  
5       difference is ten and the standard error is a half, that  
6       means there is a big difference and it's really precisely  
7       estimated.

8               If I told you that the average difference was  
9       ten but the standard errors were 30, then actually I have  
10      very little -- there is very little I can be confident  
11      about whether those two groups are different. So the  
12      standard errors give me some sense of how confidence I am  
13      in whether those differences are actually statistically  
14      significant.

15             And just for the general audience, the kind of  
16      analogue that you see all the time in the political realm  
17      is often times when they are reporting polls prior to an  
18      election. They will say, President Barrack Obama has  
19      60 percent of the vote and the sampling error is plus or  
20      minus five. That is a little less precise than if they  
21      said it was plus or minus one. I think all of us have had  
22      an encounter with sampling variation. That is what the  
23      standard errors are designed to do, to tell us how certain  
24      we are about something.

25      **Q.** Thank you. Can you tell us a little bit more just

1 in general about the study that you performed?

2     **A.** Sure. We are going to use Rosenfeld as a starting  
3 point. Like I said, we are going to use the same outcome,  
4 the same category, family type categories. We are going  
5 to use the same control variables and use Model Five as  
6 the starting point. And what we are going to do is make  
7 one small change. We are going change the omitted group  
8 from Heterosexual Married to Same Sex Couples. And what  
9 that would allow us to do is all of those comparisons that  
10 have stars on them right now, when you see those stars  
11 that is telling you those groups are different than  
12 Married Heterosexual. Those stars will tell you nothing  
13 about whether or not those groups are different from same  
14 sex cohabiting couples. So all we are going to do is  
15 change the groups.

16             Let me show you how that works. So this is, so  
17 if you look at Column Five, those numbers right there, I  
18 am going to show you the exact same numbers in Column One  
19 of this new table. And this is Table Two from my paper.  
20 So I haven't done anything at this time. All I have done  
21 is re-reported his results in that column. And what we do  
22 is replicated his data from scratch. And Rosenfeld was, I  
23 mean he's a great scholar. He was generous. He shared  
24 his data with us. And so we were able to use his data to  
25 verify that we were doing things exactly the same way he

*12=1-285; April Deboer, et al. v. Richard Snyder, et al.*

1 was. And that's why I can show you his results using our  
2 data.

3 So at this point there is no difference between  
4 what we did and what he did. And notice again you see a  
5 lot of groups with stars on them. But those stars are all  
6 relative to the Heterosexual Married Group. So now all  
7 I'm going to do is just change this Column Two of Table  
8 Two. I am just going to change what the omitted group is.  
9 So now the omitted group is going to be same sex couples.  
10 Now if you look you can see this right away. You will  
11 notice that the number in the upper left and the number  
12 that is just diagonal from it, those are identical to each  
13 other.

14 **Q.** Can you tell -- can you identify for purposes of --  
15 just for purposes of the record and for purposes of all  
16 you who are trying to understand which two numbers you  
17 were referring to, that you were comparing to each other.

18 **A.** I will describe in words but I will point them out.  
19 look at Column One in Row One you will see a number which  
20 is negative .142 and it has a standard error of .125. So  
21 the other thing I have done here is I've added in the  
22 standard errors. That's something that should have been  
23 there in the first place. This is what he would have put  
24 if he put the standard errors.

25 And all I'm going to do is compare that to the

1 second column, second row, and you will notice that this  
2 number is exactly the same as the other number. The only  
3 difference is one is negative and one is positive. And  
4 all that is happening here is in the second column the  
5 omitted group is Same Sex Couples. And so all we are  
6 saying is that children raised by heterosexual married  
7 couples are more likely to be making normal progress in  
8 school.

9 Now, we still have the problem that I can't  
10 interpret that number for you .142. It's call a logistic  
11 co-efficient. It doesn't have a meaningful  
12 interpretation. But the thing you notice right away is if  
13 you go down this row, so I am in the second column, the  
14 Married Women row. Now you will see that we have this  
15 difference. It's negative .008. It has a standard error  
16 of .130. And notice there is no asterisk on this.

17 So another way -- so the way Rosenfeld described  
18 his results is he says, hey, look, children raised by same  
19 sex couples are not statistically different from children  
20 raised by heterosexual married couples. It would have  
21 been equally valid for him to have said, hey, look, they  
22 are not any different, statistically different than  
23 children raised by single mothers or other groups. So,  
24 the only group that they there statistically different  
25 from is a group that is rather disadvantaged which is

*12=1-285; April Deboer, et al. v. Richard Snyder, et al.*

1 separated divorced or widowed men.

2 Q. Can you describe for us, again, what this means when  
3 something is statistically significant?

4 A. Yes. I think I will be able to illustrate that  
5 question here in a moment because what I am going to try  
6 to do is help you see the difference between whether  
7 something is statistically significant different or  
8 whether it's economically significant.

9 So I told you before these numbers actually  
10 don't have any means. They are logistic progressions.  
11 There is two things you can do to make them meaningful.  
12 One is you can do something called an odds ratio which is  
13 what I'm going to show you. The other is you can report a  
14 marginal effect. So this last column, these are odds  
15 ratios. And again, I'm still using Rosenfeld's sample,  
16 making all the same decisions he did. I'm just providing  
17 results in a way that you can interpret them.

18 Q. What is an odds ratio?

19 A. So an odds ratio is, the best way to think about it,  
20 let me put you in the context of these numbers. If you  
21 look at Column Four, Row Two, right here you see a number  
22 that is 1.153. This does have a meaningful  
23 interpretation. What this means is that the odds of a  
24 child in a heterosexual married household is about  
25 15 percent higher that will be making normal progress

1 through school than a child raised by a same sex couples.  
2 And then, yes, that would be the way to interpret it.  
3 It's the odds are about 15 percent higher.

4 **Q.** And was that what you found when you performed your  
5 study?

6 **A.** Actually this table right here is out of our study.  
7 But, again, at this point if you look across the bottom we  
8 are using this sample size. At this point I have not  
9 changed Rosenfeld's study. The only thing I have done is  
10 I have changed the reference group. I've added in  
11 standard errors. And I put it in a way that is easier to  
12 interpret.

13 Now, what you do can with the standard errors is  
14 you can create something called a 95 percent Confidence  
15 Interval for that odds ratio. I told you that children  
16 raised by heterosexual married couples, their odds of  
17 making normal progress in school is 15 percent higher than  
18 a child raised in a same sex couples.

19 Now that I have standard errors I can tell you  
20 what the Confidence Interval is. And what that Confidence  
21 Interval is, so this will tell me the range of which I'm  
22 certain about the truth. And that truth ranges from  
23 children being raised by same sex couples doing slightly  
24 better off, about 10 percent better off, to doing  
25 47 percent worse off. So this is rather imprecise. This

1 is a big range.

2 And actually if you read the footnote in  
3 Rosenfeld's paper it was pretty clear he should have known  
4 this from the start because he did a power calculation. A  
5 power calculation is going to tell you how big your  
6 Confidence Interval is going to be and what is the  
7 likelihood you will be able to detect the true effect.

8 What he said is if the odds of grade retention  
9 were one point five times higher for children with  
10 heterosexual married parents -- so right now I'm reading  
11 off the screen. If the odds of grade retention were one  
12 point five times higher for children of heterosexual  
13 married parents than for children of same sex couples, the  
14 power to detect the difference would be lower but still  
15 substantial at .83.

16 Now, the normal cut-off for a power calculation  
17 is .8. So what he is telling you from the start and what  
18 .8 means is that, imagine there is a true difference.  
19 There is a 20 percent chance that you will fail to detect  
20 a true difference. So if your power is .9 that means  
21 there is only a 10 percent chance you will fail to detect  
22 a true difference. And the cut-off, again, when we  
23 pre-commit to decision rules, we pre-commit to a  
24 significance level of 5 percent. We also generally commit  
25 to a power level of .8.

*12=1-285; April Deboer, et al. v. Richard Snyder, et al.*

1           And so what Rosenfeld is saying from the start  
2           is that suppose the effect were something like 45 percent  
3           higher, I wouldn't be able to detect it. And that's  
4           exactly what we are finding here. What we are finding in  
5           this table is that the difference is 15 percent and so he  
6           would have known right from the start that if the true  
7           difference was 15 percent, he would have never been able  
8           to detect it given his sample size.

9           **Q.** Can you tell us again a little bit more about this  
10          idea of statistical significance and the ranges that you  
11          have been speaking of. Just kind of more in layman's  
12          terms for those that might not be as educated in doing  
13          those studies?

14          **A.** In this case, this effect right here is not  
15          statistically significant. And this is what Rosenfeld  
16          emphasizes in his study. He says, hey, look, they are not  
17          statistically different from each other.

18                 Now in contrast, if you focus on the economic  
19          significance, then you would say actually it's 15 percent  
20          difference a big deal? Is being 15 percent more likely to  
21          be held back in school, is that a big deal? I think  
22          actually that is something that would concern most  
23          parents.

24                 So if you think, if something is 15 percent more  
25          likely to happen, would you be concerned? I think most

1 parents would be concerned about that kind of odds ratio.  
2 Again, that is a judgment call. But if that is the true  
3 difference, what the power calculation indicates is that  
4 that there will no way to actually statistically detect  
5 that kind of true difference.

6 Q. Can you tell us as a result of your replication and  
7 what you did here, what you found, what were the  
8 conclusions of your findings?

9 A. For this part of the replication, again, I am going  
10 to make one other change to a study in a second, but at  
11 this point, I have not changed his sample. I will do that  
12 in a moment. But if I don't change his sample, all I can  
13 really conclude from this table is that the outcomes of  
14 children raised by same sex couples are not statistically  
15 different than almost any group, even groups that we  
16 know -- that we have thought of historically as being  
17 disadvantaged like single mothers.

18 So, unfortunately, the outcomes of children  
19 raised by single mothers are different from the outcomes  
20 of children raised by a father and mother. And so this  
21 would be saying that we can't even make that distinction  
22 for these children.

23 Q. Then I think, Doctor Price, if you move to the next  
24 slide, I wanted you, for purposes of the Court, I know you  
25 explained this whole idea of statistical significance.

1 Are you familiar with a phrase, null hypothesis?

2 **A.** Yes. So this will be a little counterintuitive to  
3 some people in the audience. But, in fact, let me use a  
4 simple analogy. Imagine I wanted to prove that reading to  
5 your kid is important. We will be really clear. This  
6 means kids that get read to by their parents, they score  
7 better on reading scores at school. This is a reasonable  
8 thing to assume is true.

9 And so the way I would prove that statement is  
10 true is I would actually assume the opposite. So I would  
11 formulate a null hypothesis. I would say, let's just  
12 suppose that reading to your kid has no impact on the  
13 reading test scores. So my null hypothesis is that if I  
14 compare kids that are read to a lot and kids that are not  
15 read to a lot, I am going find no difference in test  
16 scores. And what I do is I conduct a statistical test.  
17 And what the that statistical test will tell me is if my  
18 null hypothesis is incorrect.

19 So the way you prove something is by rejecting  
20 the opposite. And this gets tricky because imagine that  
21 what I want to prove is there is no difference. So  
22 imagine I wanted to prove that reading to your kid has no  
23 impact on reading performance in school. This is actually  
24 a challenging thing to do because I could run my analysis  
25 and if my sample is not big enough, then maybe the reading

1 score difference is, I don't know, maybe 5 percent. But  
2 my standard errors are big enough that I don't know if  
3 that is statistically significant. Then I actually  
4 wouldn't be able to say anything meaningful. All I would  
5 say is I failed to reject my null hypothesis.

6 If you really want to prove that there is no  
7 difference, you have to do two things. One is you have to  
8 show that the magnitude of the difference is really close  
9 to zero. And you have to have really, really tight  
10 standard errors or really tight Confidence Intervals.  
11 What this will allow you to do is say something like,  
12 reading to your kids, imagine the differences is only one  
13 percent for reading to your kids and I have a really tight  
14 Confidence Interval. I might be able to say, well reading  
15 to your kids really doesn't benefit them any more than  
16 3 percent. So my Confidence Interval would allow me to  
17 rule something out. But it never really would let me say  
18 that there is no effect. All I can do is rule out effects  
19 that are large. And if I can rule out effects that are --  
20 if I can rule out that it doesn't do any better than  
21 2 percent, maybe we realize that that's not important.  
22 But, again, like it's really challenging to show there is  
23 no effect. It's very -- it's much easier to show there is  
24 an effect because all you have to do is have enough  
25 observations to reject the null hypothesis.

*12=1-285; April Deboer, et al. v. Richard Snyder, et al.*

1       **Q.** Can you tell me how that concept fits into what  
2 we're talking about today?

3       **A.** Yes. So, in some sense, Rosenfeld's study is in a  
4 harder position than mine because what Rosenfeld needs to  
5 show if his claim is there is no difference is he needs to  
6 have estimates that are really close to zero and really  
7 tight Confidence Intervals. And what that means in order  
8 to do that is you have to have a really large sample.  
9 What his power calculation shows is he didn't have a big  
10 enough sample. It's a big sample relative to past  
11 research but there are some reasons why it's underpowered.

12               Now, on the flip side, if I wanted to show there  
13 are differences, then you just need a sample that is big  
14 enough to reject the null hypothesis. It's an unfortunate  
15 asymmetry in the way science works. It's always easier to  
16 reject a null hypothesis than it is to prove that the null  
17 hypothesis is true.

18       **Q.** Thank you. Can you tell me about any restrictions  
19 that Doctor Rosenfeld used on --

20               **THE COURT:** Let's take a break here. Is this  
21 a good time to break? And then we'll talk about the  
22 restrictions.

23               **MS. BRYA:** Yes, your Honor.

24               **THE COURT:** Okay. We're going to take 15  
25 minutes. And for those students, I don't know if you are

*12=1-285; April Deboer, et al. v. Richard Snyder, et al.*

1 coming back or you are on your way home or school or  
2 something. You are welcome the whole day and the next day  
3 but good luck to each of you. There is always room for  
4 good new attorneys. We stand in recess.

5 (Recess from 2:50 p.m. until 3:10 p.m.)

6 **THE COURT:** Okay. You may continue, counsel.

7 **MS. BRYA:** Thank you, your Honor. And thank  
8 you, Larry, for asking us to slow way down --

9 **THE COURT:** Yes, please slow down.

10 **MS. BRYA:** And we will try to slow way down.  
11 We will try to do that as best we can.

12 **THE COURT:** And you will get a perfect  
13 transcript if we can slow down.

14 **MS. BRYA:** Yes, I know. I know. Thank you,  
15 very much for bring that to our attention. And we will  
16 make sure that we speak slowly.

17 And Doctor Price, I will try to remind you as well  
18 to speak slowly.

19 **BY MS. BRYA:**

20 **Q.** I think before the break we were speaking a little  
21 bit or we were starting to speak a little bit about some  
22 restrictions that Doctor Rosenfeld employed in his study.  
23 Can you explain a little bit about those restrictions and  
24 what that means?

25 **A.** Sure. So, Rosenfeld uses two restrictions on which

1 children to include -- Rosenfeld uses two restrictions on  
2 which children to include in his sample. The first  
3 restriction is that a child must be the biological child  
4 of the household head. That's the first restriction. The  
5 second restriction is it must be a child who has been  
6 living at the same address with the same parents for at  
7 least five years.

8 **Q.** What are the consequences of using these particular  
9 restrictions in the study?

10 **A.** There's two main consequences. The first is that  
11 you eliminate over half the children from your sample so  
12 these are children that won't be counted as part of your  
13 analysis. And by removing half your sample, it will  
14 necessarily reduce the precision that you have.

15 And the second consequence is that by imposing  
16 the sample restrictions, it cuts off two of the potential  
17 channels through which family structure affects child  
18 outcomes. And one of those is biological relatedness.  
19 And the other is stability.

20 **Q.** Doctor Price, if you move to the next slide, I  
21 believe it's Table Three, can you explain to us what this  
22 table shows?

23 **THE COURT:** Was table is that?

24 **THE WITNESS:** So the table that you see on  
25 these slides, this is Table Three from the paper that I

1 published.

2 **THE COURT:** I just wasn't sure.

3 **THE WITNESS:**

4 **A.** This is from the paper published with Doug Allen and  
5 Catherine Pakaluk. Now, the first column in Table Three  
6 is simply showing you the results from before. If you  
7 look at the bottom of that table you will see 716,000  
8 children. This is the sample used in Michael Rosenfeld's  
9 paper.

10 **Q.** So the first column there then deals solely with  
11 Doctor Rosenfeld's study and his results and numbers?

12 **A.** Yes. And if you are looking at the bottom of the  
13 table you will see a little row that says, Sample  
14 Restrictions. And so then we just list what the two  
15 sample restrictions are. The first one is that you have  
16 to be the only child or biological child of the household  
17 head. And the second is that you have to be a five year  
18 resident. That's five years in the same house with the  
19 same parents.

20 And then if you look across the bottom of this  
21 table, the X's indicate which of those restrictions are in  
22 place. So in the first column those restrictions are in  
23 place. This is the approach that Rosenfeld used. In the  
24 second column only the second restriction, only the first  
25 restriction is in place.

*12=1-285; April Deboer, et al. v. Richard Snyder, et al.*

1       **Q.** What is that first restriction?

2       **A.** That's the own child restriction. And you can  
3 actually look across the bottom of the table. So as you  
4 see, what happens to the sample size, you went from seven  
5 hundred kids to one point three million kids. So this  
6 case, just by relaxing the five year resident restriction,  
7 your sample size goes up dramatically.

8               And then if you look in the third column, what  
9 we are doing there is imposing the five year resident  
10 restriction. But we are relaxing the own child  
11 restriction. So, again, there you can see your sample  
12 size increases from 716,000 up to 792,000. So the bigger  
13 restriction is the five year residence restriction.

14              If you look at the Fourth Column you will notice  
15 that neither of those rows have an X. And so we actually  
16 are not imposing any restriction on the sample. And we do  
17 agree with Michael Rosenfeld that biological relatedness  
18 is an important characteristic.

19              And so we continue to include that as a control  
20 in the analysis. But we don't just throw those  
21 non-biologically related children out of the sample. And  
22 the same thing with the five year resident characteristic.  
23 That is also -- stability is an important control  
24 variable. So we included that in the regression as a  
25 control. But, again, we don't throw out children who

1 haven't been in the same home or with the same parents for  
2 less than five years.

3 Now, let me just direct your attention to the  
4 very top of the table. If you look across the first row  
5 it says Married Heterosexual. Now, the comparison group  
6 in this table is children being raised by same sex  
7 couples. And what the numbers are that you are seeing,  
8 those are odds ratios.

9 **Q.** When you talk about the numbers that we are seeing,  
10 what numbers are you referring to?

11 **A.** In Column One, this would be the number 1.153. In  
12 Column Two this would be the number 1.258. In Column  
13 Three, this would be 1.295. And then in Column four would  
14 be 1.354. These are all odd ratios. These are telling  
15 you how much more likely it is for a child in a married  
16 heterosexual household to be make normal progress in  
17 school relative to a child being raised by a same sex  
18 couples.

19 If I had to interpret those numbers, that first  
20 number in Column One means that if I impose both of the  
21 sample restrictions, then children being raised by married  
22 heterosexual household are about -- their odds of making  
23 normal progress in school is about 15 percent higher and  
24 it's not statistically significant.

25 If I go to Column Two, the way to interpret that

1 is that children being raised by married heterosexual  
2 parents are 25 percent more likely to be make normal  
3 progress in school. And this is statistically  
4 significant. And when you see those three asterisks, that  
5 mean that is it's statistically significant at the  
6 1 percent level. Really strong level significance.

7 And if you go to Column Three, it says that  
8 children being raised by married heterosexual couples, the  
9 odds of them making normal progress in school is  
10 29 percent higher than children raised by same sex  
11 couples. And this is statistically significant at the  
12 5 percent level.

13 And if you go to the Fourth Column, what that  
14 indicates is that children being raised by married  
15 heterosexual couples are 35 percent higher odds of making  
16 normal progress in school. And this is statistically  
17 significant at the 1 percent level.

18 Now, the reason we presented the table this way  
19 is it illustrates a couple points. First of all, the  
20 conclusions you draw are quite striking and quite  
21 different if you employ a different set of sample  
22 restrictions. And the second thing you notice is looking  
23 at Column Two and Three, is that relaxing either one of  
24 the assumptions causes you to have a statistically  
25 significant difference and an economically significant

1 magnitude.

2           So I will describe a little bit about why I  
3 don't think you should impose the sample restrictions but  
4 keep in mind that it would have to be the case that both  
5 of these sample restrictions would have to be valid to  
6 make the results not statistically significant because  
7 relaxing either one of those restrictions gives us results  
8 that are noticeably different than what Rosenfeld had.

9       **Q.** Thank you. You referenced, for purposes of this  
10 table, you referenced this idea of an own child  
11 restriction. Can you explain what that means?

12       **A.** Let me provide a little bit of information about how  
13 the census codes this variable. So, the census  
14 instructions about how to determine whether the child is  
15 the own child of the household head is the specific  
16 instruction, is this a natural born son or daughter of the  
17 household head? And then in addition, the census gives  
18 you instructions on who the household head is. And the  
19 instructions are it's the person or one of the people  
20 living here who owns, is buying or rents this house,  
21 apartment or mobile home. If there is no such person,  
22 start with any adult living or staying here. Just as a  
23 point of reference so you can understand how this variable  
24 works --

25       **Q.** Slow down a little bit. Thank you.

1       **A.** So to give you a point of reference of how this  
2 variable works in households with married heterosexual  
3 couples, 95 percent of the time the male parent is listed  
4 as the household head. Whereas in heterosexual cohabiting  
5 households it's actually only -- that's true only  
6 45 percent of the time. So it's an interesting statement  
7 about cohabiting unions in the United States, that it's  
8 actually more often to be the case that it's the woman of  
9 the household that is listed as the household head.

10               This is important because this variable about  
11 whether you are the own child in the household head hinges  
12 completely on which of the parties in the household is  
13 recorded in the census as being the household head. So  
14 the majority of children who are not the own child of the  
15 household head are actually the own child of the other  
16 parent in the household. So which children you throw away  
17 hinges on this in some ways arbitrary distinction of which  
18 of the two parents is considered by the census to be the  
19 household head.

20       **Q.** And when you say which children you throw away, you  
21 mean that the data is not used, is that right?

22       **A.** So I don't mean we throw away children. But in some  
23 sense that's what is happening when we impose sample  
24 restrictions. We are telling the children, you do not  
25 count as part of this analysis. You don't get to

1 contribute to our results.

2 And in some ways, Michael Rosenfeld is arguing  
3 that because we don't impose the own child restriction, we  
4 are leaving stepchildren in the analysis. And our point  
5 really is that in a same sex couples household the child  
6 cannot be the own child, cannot be the natural born child  
7 of both parents.

8 And so if you were to, in a real sense, exclude  
9 stepchildren from your analysis, the study couldn't happen  
10 in the first place. All you would have left are children  
11 that were, actually, I mean, so he excludes adopted and  
12 foster children. In same sex couples household it has to  
13 be the case that the child is either a foster child, an  
14 adopted child or is biologically related to only one of  
15 the parents.

16 **Q.** Can you tell me, tell the Court about the stability  
17 restriction that Doctor Rosenfeld employed?

18 **A.** Yes. So the stability restriction is based on some  
19 information that is available in the 2000 census that asks  
20 each person in the household whether they were in that  
21 same household five years ago. And so the stability  
22 restriction then says, let's only use families where both  
23 the child and the parents have lived in the same address  
24 for the last five years.

25 Now, this restriction, what it does is it

1 eliminates 47 percent of children being raised in married  
2 heterosexual households even though for the majority of  
3 these, these are not family structure changes. These are  
4 residential changes. It also eliminates 78 percent of  
5 children being raised in heterosexual cohabiting  
6 households. And it eliminates 57 percent of children  
7 being raised in same sex couples.

8           So our concern with the stability restriction  
9 is, one, is it eliminates a lot of children from the  
10 sample, particularly children in the types of family  
11 structure types that we would like to include in the  
12 analysis. And the second thing it does is it cuts off one  
13 of the mechanisms through which family structure affects  
14 child outcomes. And that's stability.

15       **Q.** What is the motivation for using this particular  
16 restriction?

17       **A.** Yes. So, clearly when we are looking at an outcome  
18 like being held back in school, it's clear that that  
19 outcome is the result of things that have happened in the  
20 child's life over the last several years. And so what  
21 Rosenfeld wanted to do is he wants to be able to match the  
22 child's current family structure with the family structure  
23 that they experienced five years ago.

24           Now, the cost of that is that you throw away a  
25 lot of data and you cut off one of the channels through

1     which family structure affects children which is  
2     stability. But I think it helps to highlight that the  
3     benefits of matching current family structure and past  
4     family structure are not as great as you would expect.  
5     And let me -- this will be a little technical so I will  
6     try to be as clear as I can.

7     **Q.** Thank you.

8     **A.** But what will happen is if I don't impose this  
9     restriction I let all of these kids stay in the sample,  
10    then I introduce something called measurement error which  
11    is for a particular kid, I'm saying, today you are part of  
12    this type of family. And I'm going to assume that was the  
13    same type of family you had five years ago.

14               Now, for many kids this will be true. All of  
15    the kids that Rosenfeld kept in his sample, this will be  
16    true. It will also be true for lots of kids that he  
17    excluded from his sample because some of these kids have  
18    been in a heterosexual married household for the last five  
19    years. They just happened to live in a different  
20    location. And this could be true about same sex couples.  
21    It could be true about heterosexual cohabiting couples.

22               In this case what I am doing is introducing  
23    something called measurement error. And the consequence  
24    of measurement error is that it biases your co-efficients  
25    toward zero and it makes it more difficult to detect a

1 true effect.

2 And so the point we are making is that the  
3 consequences that Rosenfeld is trying to avoid by imposing  
4 this sample restriction is actually resulting in the exact  
5 same kind of consequences happening which is reducing the  
6 precision and making it more difficult to find a true  
7 effect.

8 **Q.** Do you have any concerns with the sample size used  
9 by Doctor Rosenfeld?

10 **A.** Yes. So I mentioned earlier that this is by far the  
11 largest data set. It has by far the most children raised  
12 by same sex couples of any other data set nationally  
13 representative or not. But there's a few reasons why the  
14 effective sample size is much smaller. And so I listed  
15 these three reasons right here to try explain them  
16 briefly.

17 But, first of all, even though our full data set  
18 has 1.6 million children, only a small fraction of  
19 children in the United States are raised by same sex  
20 couples. So right from the start this data set that looks  
21 very large, one point six million, actually only has, you  
22 know, 5,600 -- 5,000 or 6,000 that are in these type of  
23 family.

24 Now, the second problem is that the outcome  
25 measure we are looking at is binary and uncommon.

1       **Q.** What does that mean?

2       **A.** It means, it's a yes or no variable. It's like  
3 having been held back or not. And it actually doesn't  
4 happen that often. I showed you in that original table  
5 that in the data itself it only happens about 2 percent of  
6 the time. If we are using something like a math test  
7 score and we would say the math test score is continuous,  
8 meaning it spans a large -- has a lot of variance in it  
9 and it's common. Everyone has, if they take the test they  
10 will have a test score. If that was may outcome variable  
11 then actually having five or 6,000 kids would be  
12 wonderful.

13               In this case we are limited because we only have  
14 that outcome variable that is binary and uncommon. But  
15 actually it's the third reason that bites the most. And  
16 that's that the way that you measure being held back in  
17 school is you ask the question, are you older than you  
18 should be given your grade? And the problem with the 2000  
19 census is we don't know your exact grade. If we know your  
20 exact grade we would know perfectly well whether or not  
21 anyone was held back.

22               In the 2000 census all we know is are you in  
23 first through fourth grade or are you in fifth through  
24 eighth grade? And so let's think about this for a second.  
25 If a child is nine years old, then he should actually be

1 in second grade, he or she. And so if I observe any the  
2 data, all I am going to know is he is somewhere between  
3 first and fourth grade. He could be held back or he could  
4 not. I have no idea. With nine year olds I have no idea  
5 whether they have been held back.

6 Now, an 11 year old, I do know because if I  
7 observe an 11 year old being in first through fourth  
8 grade, then I know that he must have been held back. The  
9 same thing with the 15 year old. If I see a 15 year old  
10 that is in fifth grade then I know he must have been held  
11 back. And this is why in that first table I showed you  
12 Rosenfeld multiplied the numbers by four because there was  
13 actually two age groups for which he has the outcome  
14 variable measured precisely.

15 **Q.** So does this idea that you are speaking of, does  
16 this result in any sort of measurement error?

17 **A.** Yes. So this actually is a troubling type  
18 measurement error. It means if I were to run Rosenfeld's  
19 analysis on just nine year olds, I wouldn't detect any  
20 different across family structure groups because every  
21 single nine year old in the sample is coded as not having  
22 been held back.

23 So what that means is if I run my analysis on  
24 say all the ages from 5 to 17, then I am going get a  
25 really precise estimate for the 11 and 15 year olds. But

1     this statement is going to be diluted by all of the other  
2     ages for which I actually can't measure the outcome  
3     variable. And here is just the simple table. It's just  
4     using the data and just showing what are the ages of the  
5     kids that are recorded as being held back. So in the data  
6     in you look at 11 year olds, there is fourteen thousand  
7     three hundred kids that have been held back. And the  
8     reason they are held back --

9                   **MS. NESSEL:** Your Honor, if it please the  
10    Court, we have never seen this particular graph before.  
11    It's not in the report anywhere. I don't think there is  
12    any anything that speaks to this in the report. And so I  
13    think it's outside the bounds of what Doctor Price should  
14    be permitted to testify to.

15                  **THE COURT:** Why don't you voir dire the  
16    witness and see. I'm sorry, counsel. Doctor, this is a  
17    chart that you prepared.

18                  **THE WITNESS:** This is something -- I use the  
19    data to prepare for demonstration purposes.

20                  **THE COURT:** Okay. And the information that  
21    is contained on this, is it contained in your report?

22                  **THE WITNESS:** This was not. This particular  
23    report was not contained in the reports.

24                  **THE COURT:** But was the information  
25    contained --

1           **THE WITNESS:** No. This information, this  
2 particular issue became apparent as I started to work with  
3 Rosenfeld's supplementary report.

4           **THE COURT:** It wasn't in your report?

5           **THE WITNESS:** It wasn't in my expert report.

6           **THE COURT:** Then I will sustain the  
7 objection.

8           **THE WITNESS:** That's fine. I agree.

9           **MS. BRYA:** Your Honor, we can move on  
10 obviously. That's fine.

11 **BY MS. BRYA:**

12       **Q.** You spoke before about the consequences of  
13 measurement error. And I think if you go forward a couple  
14 slides I think you have a table that shows some of the  
15 comparison of the results. Can you -- this is the one.  
16 Can you explain to us what this means? What this table  
17 shows?

18       **A.** Yes. So this --

19           **MS. NESSEL:** Your Honor, I have the same  
20 objection as before. I don't believe this was contained  
21 anywhere within the expert's report.

22           **THE COURT:** Doctor, was it contained in the  
23 report?

24           **THE WITNESS:** This again was prompted by --

25           **THE COURT:** I will sustain the objection.

1 Thank you.

2 **BY MS. BRYA:**

3 **Q.** Doctor Price, when you performed your study with  
4 Allen and Pakaluk, what were your ultimate findings?

5 **A.** Okay. So our ultimate findings were two-fold. The  
6 first was that if we restricted ourself to the sample  
7 restrictions that Rosenfeld used, then by changing the  
8 omitted group used, we highlighted the fact that while it  
9 is true that Rosenfeld was not able to detect a  
10 statistically significant difference between children  
11 raised by same sex couples and children raised by married  
12 heterosexual couples, it would have been equally valid to  
13 say he couldn't detect a difference between same sex  
14 couples and, say, single mothers.

15 The second point of the paper was that one of  
16 the reasons, main reason he was having trouble detecting  
17 differences across groups was that he was eliminating over  
18 half of the children from the sample. And this was having  
19 two consequences. One is it was dramatically reducing the  
20 precision on the estimates. And it was also cutting off  
21 two of the channels through which family structure affects  
22 the child outcomes. And those two channels are about  
23 relatedness and stability.

24 **Q.** So when you performed your study did you find  
25 differences between those children raised by same sex

1 couples versus children raised by heterosexual married  
2 couples?

3 **A.** Yes. So like I showed on that earlier slide,  
4 depending on which sample restrictions you use -- so I  
5 showed you four different results.

6 **Q.** Can you go back to this, if that's helpful?

7 **A.** So, this would be the main results of the paper is I  
8 think there is four ways that you could run the analysis.  
9 These are different sample restriction you would employ.  
10 I think actually what would be standard and typical for  
11 more economists would be to use the Fourth Column which  
12 includes the full sample of children, but controls for  
13 things like own child or five year resident.

14 Now, if you feel really strongly about one of  
15 those restrictions, then if you employ either of those  
16 restrictions then you do find that there is a noticeable  
17 difference between children raised by same sex couples and  
18 married heterosexual couples. And, again, this is working  
19 within the confines of the approach that Rosenfeld used  
20 using the same control variables, using the same outcome  
21 variables.

22 **Q.** When you say there is a noticeable difference, what  
23 do you find? Are the children raised by heterosexual  
24 married couples, are their outcomes better or worse than  
25 those of same sex couples?

1       **A.** Yes, so if you use the Fourth Column, the way to  
2 interpret that would be to say that children raised by  
3 both the father and mother are a married heterosexual  
4 couple, their odds of making normal progress in school is  
5 35 percent higher than a child raised by same sex couples.  
6 And this is statistically significant at the 1 percent  
7 level. That's the comparison that Rosenfeld made.

8               In this case now you actually have precision to  
9 compare heterosexual cohabiting couples and you find that  
10 a child being raised by a heterosexual cohabiting couple  
11 has odds of making normal progress in school of about 15  
12 percent higher. And that's statistically significant at  
13 15 percent.

14       **Q.** Again, can you describe for us what it means to be  
15 statistically significant?

16       **A.** Yes. So statistically significant means we have  
17 certainty that that number is different from zero. And  
18 the standard errors tell us, so our best guess is that  
19 it's 35 percent. The standard errors tell us that it  
20 might be higher, it might be a little bit lower. But it's  
21 certainly greater than zero.

22       **Q.** After you completed your study, based on Doctor  
23 Rosenfeld's study, did you prepare a publication or  
24 article based on that?

25       **A.** Yes.

1       **Q.** If I can direct your attention to State's Exhibit  
2       Nine. Just let me know when you are there. Do you know  
3       what that document is?

4       **A.** Yes. This is the paper that was published in  
5       Demography in 2012. It's co-authored with Catherine  
6       Pakaluk and Doug Allen.

7       **Q.** And is it a true and accurate copy of the  
8       publication?

9       **A.** Yes.

10               **MS. BRYA:** Your Honor, at this time, I move  
11       for the admission of the State's Exhibit Nine.

12               **THE COURT:** Any objection?

13               **MS. NESSEL:** No objection.

14               **THE COURT:** Received.

15               **THE COURT CLERK:** I'm getting a message. Can  
16       you move the mike closer to you? Thank you.

17 **BY MS. BRYA:**

18       **Q.** You indicated before, Doctor Price, that you had  
19       found differences in the outcomes of children reared by  
20       same sex couples versus those reared by heterosexual  
21       married couples, is that correct?

22       **A.** That's correct.

23       **Q.** And I believe you said that the outcomes of those  
24       children reared by heterosexual married couples were  
25       better than that of same sex couples, is that correct?

1       **A.** That's correct.

2       **Q.** Are there other studies that support your findings  
3 regarding outcomes of children?

4       **A.** Yes. So if you look within the area of studies that  
5 use nationally representative large data sets there  
6 actually are several that provide supporting evidence for  
7 the results that we published in our demography paper.

8       **Q.** When economists perform studies and do research,  
9 along with evaluating the research, do you also try to  
10 find some explanation with respect to your findings, some  
11 reason, some cause as to why you found what you found?

12       **A.** Yes. So economists just as a general  
13 characterization are focused mostly on differences and  
14 outcomes. But it's also a very common practice in a paper  
15 that's documented differences and outcomes to provide some  
16 reasonable explanations for those differences.

17       **Q.** You mentioned before, Doctor Price, about other  
18 studies that supported the idea that there were difference  
19 and outcomes between children raised by same sex couples.

20               **MS. NESSEL:** Your Honor, I object. Counsel  
21 keeps using the word outcomes, plural. And really it  
22 should be outcome because we are only talking about one  
23 particular outcome. It's literally one.

24               **THE COURT:** Okay. If it's outcome, say  
25 outcome. If it's more than one --

1                   **MS. BRYA:** Yes, your Honor.

2   **BY MS. BRYA:**

3           **Q.** You were talking before about the difference that  
4   you found in doing your study regarding this outcome  
5   between differences between those children raised by same  
6   sex couples and those raised by heterosexual married  
7   couples and I believe you referenced some other studies.  
8   Can you tell me who performed those studies? What studies  
9   you were referring to?

10          **A.** Sure. There is three studies that when I say  
11   several studies I meant three studies. One was authored  
12   by Doug Allen, one my Mark Regnerus and the other by  
13   Daniel Potter. And actually I think one thing that is  
14   interesting about these studies is it highlights some of  
15   the approaches by which you can obtain large enough  
16   samples of children raised by same sex couples.

17                So in the case of the Rosenfeld study one  
18   approach is to find a data set that's really large to  
19   begin with and then hope there is enough children being  
20   raised by same sex couples in the data set. And this is  
21   the approach used by Doug Allen. So he's using a data set  
22   that included 20 percent of the population of Canada and  
23   in many ways his study is very similar in nature to the  
24   study that Michael Rosenfeld and then Doug, Catherine and  
25   I did. But this is using Canadian data. And in his case I

*12=1-285; April Deboer, et al. v. Richard Snyder, et al.*

1 find that children being raised by same sex couples are  
2 less likely to graduate from high school. He finds the  
3 difference to be about 35 percent.

4 Now, another approach to getting a large sample  
5 of children raised by gay or lesbian parents is to  
6 specifically over-sample them. Now, this may seem like  
7 it's the same as convenience sampling, but the difference  
8 with over-sampling is you are starting with the random  
9 sampling frame. But you are going to include -- a larger  
10 fraction of your sample will be from one particular group.  
11 So you still have a random sampling frame. But you are  
12 going to try to pick up more children that you want to  
13 focus on.

14 So in Mark's case, you used data from Knowledge  
15 Networks, a very well established way of collecting data.  
16 A bit expensive. I have not used it for that reason. But  
17 Mark had some funding that allowed him to use Knowledge  
18 Networks. He was able to gather together reasonably large  
19 samples.

20 I think what we learned from his data collection  
21 efforts is that children raised by gay or lesbian parents  
22 are challenging to find in a random sampling frame. I  
23 think he might have had a 150 or 170 kids that -- whose  
24 mother had a same sex relationship at some point. I think  
25 60 or 70 kids whose father had a same sex relationship at

1 some point.

2 And so what Mark does is he compares children  
3 from those family types to other family types. And he  
4 finds that relative to children being raised by two  
5 biological parents, children whose mother or father fell  
6 into one of those categories had noticeably worse  
7 outcomes.

8 Now, one thing that is really nice about Mark  
9 Regnerus' data is he made it publicly available almost  
10 right away. Many scholars keep the data private for a  
11 while or they keep it private forever. Mark was quite  
12 generous to make it publicly available. And as a result  
13 other scholars have been able to use the data for their  
14 own purposes. I was able to use the data myself. I was  
15 able to reanalyze the results that he published in his  
16 paper and I just made one small change. I adopted the  
17 Rosenfeld approach of combining children with a gay or  
18 lesbian parent together into a single category. And if  
19 you do that, then you find that the statistical  
20 significant difference is that Mark identifies are even  
21 stronger because any time you split a group into smaller  
22 pieces it will be harder to identify the statistical  
23 significance of any one of those groups.

24 Q. You testified before that as an economist often  
25 times you try to find some reasonable explanations to go

1 with your study or your conclusions. In your opinion are  
2 there any mechanisms that provide an explanation for why  
3 children raised by same sex couples have worse outcomes  
4 than children being raised by married heterosexual  
5 couples?

6 **A.** Yes. So as I mentioned earlier, in my expert report  
7 I talked about three reasonable explanations or reasonable  
8 mechanisms. Now, I would imagine that a psychologist  
9 would choose a different list. These have the nice  
10 feature that in almost any nationally representative data  
11 set you can identify the gender of the parents. You can  
12 generally identify whether the children are biologically  
13 related to those parents. And if there is any  
14 longitudinal component to the data I can tell how stable  
15 the family is.

16 So the three explanations that I chose to  
17 include in my report, and, again, these are of a secondary  
18 nature of providing what I would think is plausible  
19 explanations for the differences and outcomes, we are  
20 observing, and it's the fact that fathers and mothers  
21 parent differently.

22 **MS. NESSEL:** Your Honor, I'm sorry. Again  
23 I'm going to object to this entire area.

24 **THE COURT:** I understand. I understand.  
25 This is the area that you objected to before. But I think

1     that with his explanation as to what he did and why he did  
2     it, I think I will accept it.

3                 **MS. BRYA:** Thank you, your Honor.

4     **A.** So the second would be biological relatedness. And  
5     the third would be family stability. And these are three  
6     areas where these are all potential reasons why we would  
7     observe outcomes that differ based on family structure  
8     type.

9     **Q.** When you talk in terms of parental gender can you  
10    explain what you mean by that?

11    **A.** Sure. So, some of these will fall into what the  
12    plaintiff's counsel referred to as soft measures. So just  
13    and as -- and these are all based on average differences  
14    between fathers and mothers. Just as an average tendency,  
15    mothers tend to be more empathetic, tender minded and  
16    nurturing. Based on data from Norway and Sweden where  
17    they tried to make parenting as egalitarian as possible,  
18    they have generous maternity leave policies. Fathers are  
19    actually in some ways almost required to take those or the  
20    benefits are lost. And so they find even in those  
21    countries if you look at the way fathers and mothers  
22    parent their infants, the mothers are more likely to  
23    display affectionate behavior, vocalize, smile, attend,  
24    discipline and soothe.

25    **Q.** Can I ask you to slow down a little bit?

1       **A.** Sure. And then just as a general practice, mothers  
2       tend to stress emotional security and personal safety.  
3       And then in my own research I have done research on  
4       parents spending time with their children. And the really  
5       nice thing about the American Time Use Survey is you have  
6       a really objective measure of how parents spend their time  
7       with children. And you have a list of hundreds of  
8       different activities that they can do with those children.  
9       And what you find is in households that have both a father  
10      and mother you see that mothers tend to spend more total  
11      time with their children even if both parents are working.  
12      And, in particular, you see mothers spending more time  
13      reading, talking, and doing house work with their children  
14      around the home.

15               **MS. NESSEL:** Your Honor, I promise this is  
16      the last objection I am going to make about this.

17               **THE COURT:** You can make as many as you want.  
18      No limit on objections.

19               **MS. NESSEL:** If you look at the screen, how  
20      does an economist make a determination that mothers are  
21      more empathetic, tender minded and nurturing?

22               **THE COURT:** I'm sure you're going to ask him  
23      on and Cross-Examination. I will await it.

24       **A.** Now, in contrast, if you look at fathers, they tend  
25      to stress competition, challenge, initiative, risk taking

1 and independence. And actually in some of my own research  
2 about how men and women respond differently in competitive  
3 settings, this actually isn't surprising. Men tend to be  
4 overconfident. They tend to --

5 **THE COURT:** Let me ask you, I think her  
6 objection -- maybe we should put in context. Where did  
7 you get that information?

8 **THE WITNESS:** Sure. So, if you look at the  
9 first three bullet points, these are summaries based on  
10 research that was reviewed by Steven Rhodes and also by  
11 David Popano (ph).

12 **THE COURT:** That's where you got it.

13 **THE WITNESS:** The bottom bullet point is  
14 actually using my own data, using the American Time Use  
15 Survey.

16 **THE COURT:** Excellent. The father  
17 information?

18 **THE WITNESS:** And the father information are  
19 from the same sources. If you look more broadly at  
20 difference, gender differences and risk taking and  
21 overconfidence, this would be -- there is a plethora of  
22 studies in economics that looks at overconfidence in  
23 financial markets, in risk taking. I mean, there is a  
24 reason that our jails have lots of men in them.

25 So, I mean, hopefully that's not surprising. So

1 fathers have this rough and tumble approach that helps  
2 children learn self-control. And that certain types of  
3 physical violence are not acceptable. And then in my own  
4 analysis using the American Time Use Survey you observe  
5 that fathers spend more time watching TV with their kids,  
6 more time playing sports and more time doing outside work.  
7 And one of the saddest things doing research in this area  
8 is that fathers actually do not spend that much time  
9 reading to their kids. That is a very large gender  
10 difference. That's rather unfortunate on average.

11 Q. The second mechanism that you mentioned is about  
12 relatedness, is that correct?

13 A. That's correct.

14 Q. What do you mean by that?

15 A. Actually let me finish the slide really quick. I  
16 think I mentioned -- I think the reason that lots of  
17 people like to look at Sweden and Norway is any of any  
18 country in the world that has tried to eradicate gender  
19 differences in parenting, they have been by far the most  
20 successful. But even in those countries that have been  
21 very successful in getting fathers to play a bigger role  
22 in the home you still see notable differences. And I will  
23 just -- this is just a quote from Dave Popano (ph), but  
24 his statement is basically children have dual needs that  
25 must be met, one for independence and the other for

1 relatedness. One for the child and the other for support.

2 Q. So, now, if you can give us a little bit of --

3 THE COURT: Going back to the last slide,  
4 this the same sex relationship, that his quote, if each  
5 party to that relationship takes a role, that they  
6 couldn't fulfill that?

7 THE WITNESS: It's certainly true there will  
8 be same sex couples that one of the partners can adopt the  
9 typically female role and the other can adopt the typical  
10 male role. The point I am making is there are average  
11 gender differences and it's unlikely that a father could  
12 take the place of a mother.

13 THE COURT: Unlikely based upon --

14 THE WITNESS: Just the fact that we have  
15 seen --

16 THE COURT: Not statistically. You don't  
17 mean statistically. This is just based on your reading?

18 THE WITNESS: This is based on my reading of  
19 the literature. This would be based on differences from  
20 heterosexual couples.

21 THE COURT: Okay. You may continue.

22 MS. BRYA: Thank you, your Honor.

23 BY MS. BRYA:

24 Q. Can you tell me about the second mechanism you  
25 mentioned about biological relatedness, what that means?

1       **A.** Yes. So it's impossible for a child to be  
2 biologically related to both parents of a same sex couple.  
3 If you look at the children in the 2000 census 3.6 percent  
4 of children raised by same sex couples are adopted. About  
5 .8 percent are foster children. Therefore, the vast  
6 majority of children being raised by same sex couples are  
7 stepchildren. And we have learned from heterosexual  
8 couples that there is an unique set of challenges that  
9 come with step-parenting.

10       **Q.** Can you tell us what those unique challenges are?

11       **A.** So here would be a couple -- so, it's often noted by  
12 step-parents they feel like they are competing with the  
13 biological spouse of their child for time and attention.

14               **MS. NESSEL:** Your Honor, I object now as to  
15 this new screen. This is all taken from psychological  
16 literature.

17               **THE COURT:** I think we are getting off his  
18 expertise.

19               **THE WITNESS:** That's fine.

20               **THE COURT:** He is giving us some opinions.  
21 But I will sustain the objection. He is giving us  
22 opinions which he is entitled to, but I think he's outside  
23 of his expertise in terms of his economics and statistical  
24 data.

25

1 **BY MS. BRYA:**

2 **Q.** Can you tell us --

3 **THE COURT:** For the record, and I think,  
4 because it would be difficult for the plaintiffs to  
5 cross-examine and so forth. That's the reason that I  
6 think that it shouldn't come in at this point. But go on.

7 **BY MS. BRYA:**

8 **Q.** Can you tell us, Doctor Price, about the third  
9 mechanism that you referred to? I believe you said it was  
10 family stability?

11 **A.** Yes. So this would be the reason most rooted in the  
12 kind of empirical data that economists would use. And, in  
13 fact, you know, one of the best studies on this is using  
14 data from Norway and Sweden. One of the things I don't  
15 think all of us realize about Norway and Sweden, but they  
16 actually keep data on everybody in the whole country and  
17 they allow researchers to use that data. So if you are  
18 trying to answer a question like how long do couples stay  
19 together, they have kind of the perfect data to look at  
20 this.

21 The other nice thing about Norway and Sweden is  
22 they were one of the first countries to legally recognize  
23 same sex couples. So in Norway this happened in 1993 and  
24 in Sweden it happened in 1995. And the authors of this  
25 paper are really clear that in Norway and Sweden same sex

1 couples are afforded nearly all of the same legal rights  
2 as heterosexual married couples.

3 And so this paper simply examines whether or not  
4 same sex couples that has a civil union has a different  
5 stability rate than a heterosexual couple that's married.  
6 And they find that male same sex couples are about fifty  
7 percent more likely to divorce than heterosexual married  
8 couples and that female same sex couples are more than  
9 twice as likely to divorce than heterosexual couples.

10 This doesn't speak to any specific couples  
11 because there is going to be same sex couples that have  
12 long and stable relationships. This is just speaking to  
13 an average difference between two groups and provides one  
14 potential explanation for why differences in child outcome  
15 might differ between those groups.

16 **Q.** Thank you. Are you aware of any study on this issue  
17 from a scholar by the name of Balsom (ph)?

18 **A.** Yes.

19 **MS. NESSEL:** I object. I don't believe there  
20 was any mention of the Balsom study in Doctor Price's  
21 expert report. I could be wrong, but I don't recall  
22 seeing it.

23 **THE COURT:** Doctor, was there --

24 **THE WITNESS:** It was not in my expert report.  
25 It came up in the deposition.

1                   **THE COURT:** I will sustain the objection.

2   **BY MS. BRYA:**

3           **Q.** Are you aware, Doctor Price, about the Early  
4 Childhood Longitudinal Study?

5           **A.** Yes. So this one was in my expert report. So this  
6 is the data that Potter used to study the outcomes of  
7 children raised by same sex couples. When I mentioned  
8 there was other nationally representative data sets that  
9 allowed you to look at the outcomes of children from  
10 different family structure types, I mentioned there was  
11 the Allen study, the Regnerus study and the Potter study.

12                   One of the things about the Potter study is it  
13 has this really nice advantage that you can follow kids  
14 over time starting in kindergarten. And so you follow  
15 these kids up through maybe eighth grade. I think there  
16 are seven waves of data.

17                   Now, with any sample it's often hard to -- kids  
18 move or they exit the survey. And that can happen for any  
19 number of reasons. It often happens when a family breaks  
20 up. But that's not necessarily what has to have happened.  
21 But in Potter's data there was 60 children being raised by  
22 same sex couples during the fall of their kindergarten  
23 year. So it's natural to ask, well, what happens to these  
24 kids as we move to first grade or third grade?

25                   And so by the start of first grade among these

1     60 children, 33 percent have left the sample. And of  
2     those that remained, only 56 percent still live with the  
3     same sex couples. So this is 22 children. So depending  
4     on how you think about the kids who left the sample, I  
5     mean, the conservative number would be 56 percent are  
6     still with the same sex couples. If those that left the  
7     sample also had a family transition, the number would be  
8     smaller.

9             And then if you look at the same children at the  
10    start of third grade, 47 percent of them have left the  
11    sample and of those that remain, 28 percent still live  
12    with the same sex couple. It's about nine children out of  
13    the original 60.

14            Now, in contrast, you can compare this to one of  
15    the other groups Potter looked at which was two married  
16    biological parents. And for this group by the start of  
17    first grade only 13 percent have left the sample and of  
18    those that remain 94 percent are still with those parents.  
19    And if you look at by the start of the third grade  
20    23 percent have left sample. And of those, 91 percent are  
21    still living with those parents.

22            So, again, this is using US data. It's a  
23    longitudinal study that has been used in lots of research  
24    used by Daniel Potter to look at the outcomes of children  
25    in these households. But if you use the data it actually

1 provides some interesting insight into the stability rate  
2 differences across family structure types.

3 **Q.** What is that insight that you feel it provides?

4 **A.** If you compare these numbers, what you will see is  
5 that children being raised by two married biological  
6 parents are really stable. So of those that we have full  
7 information at least 94 percent are still together. And  
8 in contrast, those rates are much much lower for children  
9 being raised by same sex couples, like 56 percent or  
10 28 percent.

11 **Q.** Doctor Price, what is your opinion as to the ideal  
12 environment for raising children?

13 **A.** So, I think based on --

14 **MS. NESSEL:** Again, I am interjecting. Same  
15 objection.

16 **THE COURT:** Sustain. If he has reached an  
17 opinion based upon his expertise, not his personal  
18 opinion -- based upon his studies and so forth.

19 **MS. BRYA:** Yes, your Honor. That's what I  
20 was getting at. Based on the studies, I was trying to  
21 summarize what we have discussed today.

22 **BY MS. BRYA:**

23 **Q.** Based on the studies that you did, that you  
24 conducted, your expertise and experience, what is your  
25 opinion as to the ideal environment for raising children?

1       **A.** Yes. So based on the study that I published myself,  
2       using the Rosenfeld approach, combined with supporting  
3       evidence from Regnerus and Allen, I think this evidence is  
4       all based on large nationally representative data sets all  
5       point to same direction, that the ideal environment for a  
6       child is to be raised by a father and mother and  
7       particularly if the child is biologically related to both  
8       parents, particularly if those parents are married.

9                   **MS. BRYA:** Your Honor, if I may have a  
10       moment?

11                  **THE COURT:** Of course.

12                  **MS. BRYA:** Thank you. Thank you, your Honor.  
13       I appreciate that.

14                  **THE COURT:** You may cross-examine.

15                  **MS. BRYA:** I have no other questions for this  
16       witness.

17                  **THE COURT:** All right.

18                               -   -   -

19                               **CROSS-EXAMINATION**

20       **BY MS. NESSEL:**

21               **Q.** Doctor Price --

22                  **THE COURT:** Closer to the microphone.

23       **BY MS. NESSEL:**

24               **Q.** Out of curiosity --

25                  **THE COURT:** A little closer.

1 **BY MS. NESSEL:**

2 **Q.** The last thing you indicated was the ideal  
3 environment for children is with their biological mother  
4 and father, correct?

5 **A.** That's correct.

6 **Q.** What do you propose to do with the children of April  
7 and Jane who had biological parents that abandoned or  
8 surrendered that at birth who don't have a biological  
9 mother or father?

10 **MS. BRYA:** Objection, your Honor.

11 Irrelevant.

12 **BY MS. NESSEL:**

13 **Q.** I am asking, what would be the ideal environment for  
14 those children who no longer have a biological mother or  
15 father? Are you suggesting to the Court that people like  
16 April or Jane who are same sex couples ought not to be  
17 taking that child into their home and raising that child?

18 **MS. BRYA:** Your Honor, I think it's a  
19 compound question.

20 **THE COURT:** Can you answer it?

21 **THE WITNESS:** I can try to answer it.

22 **A.** So the way I phrased my statement was, I believe  
23 that the ideal environment for a child is to be raised by  
24 a father and a mother. And then I added a layer that said  
25 particularly if they're biologically related to those

1 parents and particularly if they -- those parents are  
2 married to each other.

3 Q. Well, not every child has the ability to have that  
4 ideal environment, correct?

5 A. It doesn't change what the ideal environment is.

6 Q. There is lots of kids in the State of Michigan and  
7 in the United States that don't have the opportunity to  
8 have that ideal environment, correct?

9 A. I would wouldn't have any information about that.

10 Q. You don't have any information about that?

11 MS. BRYA: Your Honor, I'm going to object.  
12 I think she is being argumentative.

13 THE COURT: Don't argue with him.

14 MS. NESSEL: Very good, Judge.

15 BY MS. NESSEL:

16 Q. Let's talk about how you began studying same sex  
17 parent and child outcomes associated with it, Doctor  
18 Price. Now, before you began studying data on outcomes  
19 for children raised by same sex parents, you already had  
20 the view that marriage should be restricted to a man and a  
21 woman, correct?

22 A. This was a personal religious belief.

23 Q. That you held, correct?

24 A. That I held, yes.

25 Q. Okay. And in your view that you held, that marriage

1 should be restricted to a man and woman, that was not  
2 based on any scientific research, correct?

3 **A.** That's correct.

4 **Q.** And you just stated, on your religious beliefs,  
5 right?

6 **A.** Yes.

7 **Q.** Okay. Now, did you make these religious beliefs or  
8 the belief that you held that marriage should be limited  
9 to a man and woman, did you make that known to your  
10 colleagues at BYU?

11 **MS. BRYA:** Objection, your Honor. I think  
12 that's irrelevant.

13 **THE COURT:** Sustained.

14 **BY MS. NESSEL:**

15 **Q.** You never delved into this area at all prior to  
16 2010, correct?

17 **A.** That's not correct.

18 **Q.** Well, when did you first start investigating the  
19 area of outcomes for children raised by same sex parents?

20 **A.** Going back through my files, the first paper that I  
21 sketched out related to same sex marriage was  
22 February 2007.

23 **Q.** And what was that paper about?

24 **A.** It was a paper about changes in same sex marriage  
25 laws and the decision to cohabit.

1       **Q.** And was that ever submitted for publication  
2 anywhere?

3       **A.** It was not.

4       **Q.** So, and did you ever share that paper with anyone?

5       **A.** It's possible I would have shared it with people.  
6 I'm not sure.

7       **Q.** Don't know if you shared it with anyone at all?

8       **A.** I don't know if I shared it with anyone at all.

9       **Q.** Now, you indicated, I think you indicated earlier  
10 but perhaps not, do you recall attending or being  
11 recruited to attend a seminar held at the Heritage  
12 Foundation in Washington, D.C.?

13       **A.** Yes. That occurred in December of 2010.

14       **Q.** Okay. And that was -- first of all, what is the  
15 Heritage Foundation?

16       **A.** I don't know actually.

17       **Q.** It's a conservative think tank that opposes same sex  
18 marriage, correct?

19       **A.** That's why I couldn't answer your question. I know  
20 they have a broader set of things they look into including  
21 religious liberty and other things. But I'm not clear  
22 what their --

23       **Q.** But you know that that organization opposes same sex  
24 marriage, correct?

25                   **MS. BRYA:** Objection, your Honor. I think

1 it's been asked and answered.

2 **MS. NESSEL:** I don't think it was answered.

3 **A.** I know there are people at the Heritage Foundation  
4 that oppose same sex marriage.

5 **BY MS. NESSEL:**

6 **Q.** So as a whole, as a group, as an organization, you  
7 don't know what the Heritage Foundation's position is on  
8 same sex marriage?

9 **A.** I don't know for sure but I would imagine they are  
10 opposed to same sex marriage.

11 **Q.** You go to this meeting at the Heritage Foundation in  
12 Washington, D.C., you said, in September of 2010. Were  
13 there other groups and representatives of other groups  
14 which opposed same sex marriage at that particular  
15 meeting?

16 **A.** Yes. So the Alliance Defense Fund was there. This  
17 was during -- around the time of the Perry case in  
18 California. David Blackenhorn (ph) was there to talk  
19 about his experience serving as an expert witness in  
20 California.

21 **Q.** Okay. So if this was in December 2010, it's after  
22 the decision by Judge --

23 **MS. BRYA:** Your Honor --

24 **THE COURT:** Wait, wait, please. What is your  
25 objection?

1                   **MS. BRYA:** My objection is just I would like  
2     our witness to be allowed to finish his answer, if  
3     possible.

4                   **THE COURT:** Sustained. Let him finish the  
5     answer before you ask the next question.

6                   **MS. NESSEL:** Yes, sir.

7 **BY MS. NESSEL:**

8           **Q.** Is there anything more you wanted to answer?

9           **A.** No.

10          **Q.** So in December 2010 that was after the decision by  
11     Justice Walker in the Proposition Eight Case or the Perry  
12     case had been rendered, correct?

13          **A.** Yes.

14          **Q.** And so you go to this meeting, you said, and I can't  
15     recall, you said Maggie Gallagher (ph) from the National  
16     Organization For Marriage was there, correct?

17          **A.** I think so. I wasn't sure.

18          **Q.** And representatives from the Alliance Defending  
19     Freedom were there?

20          **A.** I thought it was the Alliance Defense Fund.

21          **Q.** I'm sorry. The Alliance Defend Fund. Were there  
22     representatives there?

23          **A.** Yes.

24          **Q.** They also oppose same sex marriage?

25          **A.** I guess.

1       **Q.** As does the National Organization For Marriage?

2       **A.** Yes.

3       **Q.** And all of your fellow defense experts testifying in  
4 this case were there as well, correct?

5       **A.** I am not sure if that's correct. I know Doug Allen  
6 was there but I'm not sure about the others.

7       **Q.** Okay. So who are you not sure about then? You are  
8 sure that Doug Allen was there, correct?

9       **A.** Yes. I'm pretty sure Doug Allen was there. I  
10 imagine Lauren Marks (ph) was there but I am not positive  
11 on that. And I am not sure about Mark Regnerus.

12       **Q.** Have you ever met your co-author, Douglas Allen,  
13 before of this meeting?

14       **A.** I met Catherine before but I had not met Doug Allen  
15 before.

16       **Q.** This is your first opportunity that you met Douglas  
17 Allen who you go on and co-author the report, Exhibit  
18 Nine, I believe it is?

19                   **MS. BRYA:** Objection, your Honor. Asked and  
20 answered. She just asked him that question.

21                   **THE COURT:** Sustained.

22 **BY MS. NESSEL:**

23       **Q.** You said your guest speaker was David Blankenhorn,  
24 correct?

25       **A.** I don't know if I would refer to him as a guest

1 speaker. He was a prominent part of the meeting to  
2 describe his experience.

3 **Q.** All right. To describe his experience. He was there  
4 to talk about how things had gone so very wrong for them  
5 in the Perry case, correct? In terms of his testimony,  
6 the issues or problems that developed from his testimony?

7 **MS. BRYA:** Objection, your Honor. Hearsay.  
8 I think it's a compound question and I think it  
9 mischaracterized his testimony.

10 **THE COURT:** It's compound, but the hearsay  
11 objection is overruled. You may proceed. It's hearsay  
12 but it's what somebody else said for the purpose.

13 **A.** He described what it was like to be deposed and what  
14 it was like to go on the stand.

15 **BY MS. NESSEL:**

16 **Q.** And a discussion following the lecture or  
17 presentation given by David Blankenhorn, there was a  
18 discussion had by everyone there about the need for social  
19 science that would support same sex marriage bans like the  
20 one that existed in California, correct?

21 **A.** I imagine that was one of the discussion items.

22 **Q.** That was one of the discussions. Okay. And you  
23 participated in that discussion, I take it?

24 **A.** I wasn't a very active participant. I was a young  
25 scholar at the time.

1       **Q.** Is this when you received your grant from the  
2 Witherspoon Institute?

3       **A.** No. I actually received money before then.

4       **Q.** When did you receive your grant?

5       **A.** Well, so the work that I did for that, I mean, the  
6 money was used to pay students over Thanksgiving break.

7       **Q.** Of?

8       **A.** I don't remember if it was 2010 or 2009. My guess  
9 would be 2009 though.

10      **Q.** And you said that that money was used for -- I'm  
11 sorry?

12      **A.** I was able to entice students -- I had a bunch of  
13 students that wanted to work over the break. We used the  
14 money to pay their wages and pay for pizza.

15      **Q.** That one grant was the only grant that you received  
16 from the Witherspoon Institute?

17      **A.** Yes. That was only money. I mean, they paid me an  
18 honorarium before for -- I was a discussant. I discussed  
19 the work of some of the presenters at a conference held at  
20 Princeton about the social costs of pornography.

21      **Q.** Okay. So now it's at -- I should say they're at  
22 this December 2010 meeting or sometime after that that you  
23 and Douglas Allen and Catherine Pakaluk decided to do your  
24 critique of Rosenfeld's study together, correct?

25      **A.** So actually as of June 2010, I started to -- I made

1 a list of projects that would be interesting to do related  
2 to same sex marriage and same sex parenting. Following  
3 that meeting Doug and I ended up working on another  
4 project together. I started the demography paper that I  
5 talked about today in about March of 2010. I worked on it  
6 completely by myself until about November, at which point  
7 I had done all of the empirical work and I asked Doug and  
8 Catherine to join me as co-authors. Catherine is a  
9 Harvard trained economist and I asked her to help double  
10 check my empirical work and I asked both Doug and  
11 Catherine to help with finishing the writing of the paper.

12 Q. The data that you collected, I think you said  
13 March 2011, where did you get that data from specifically?

14 A. Repeat the question.

15 Q. The data. I mean, you said you started collecting  
16 data in March of 2011. Is that what you indicated?

17 A. So all I know -- so I went to try to recreate the  
18 time line of these events and all I know is that on  
19 March 2011 that is the first date that you see a draft of  
20 the paper in relatively complete form.

21 Q. When you say you see a draft, where would this draft  
22 appear?

23 A. Just in the files on my computer.

24 Q. Had anyone else seen this draft up until the time  
25 that you discussed this with Catherine Pakaluk and Douglas

1 Allen following your December 2010 meeting with them?

2 **A.** Again, the thing is, I don't actually know if I  
3 discussed the paper with Doug or Catherine until  
4 November 2010. That is the first time their names appear  
5 on the paper.

6 **Q.** Right. And it's after that that you all decided to  
7 do this critique collectively, correct?

8 **A.** Yes. I had been working on it on my own starting as  
9 early as June 2010. By March 2011 there is a draft that  
10 has my name on it for which the empirical work is  
11 relatively complete. You see improvements on that draft  
12 in April, May, June, July of 2011, and then starting in  
13 November, you see Catherine and Doug's names added to the  
14 paper. And that was primarily to both double check my  
15 work, but also because I felt they were better writers  
16 than me and I needed some help in crafting it.

17 **Q.** So that's a yes, then, to my question?

18 **MS. BRYA:** Objection, your Honor.

19 **THE COURT:** Sustained. He answered the  
20 question.

21 **BY MS. NESSEL:**

22 **Q.** All right. How was this critique of Rosenfeld, how  
23 was that funded?

24 **A.** So, actually I had funding from BYU. They have a  
25 mentoring grant. They encouraged me to hire students.

1 And so part of that funding was used to have some students  
2 help me pull the data together and make sure that it  
3 matched up with the data that we received from Michael  
4 Rosenfeld.

5 Q. Okay. Now, let's talk for another moment about your  
6 grant that you indicated you received from the Witherspoon  
7 Institute. You indicated that that grant did not appear  
8 in the CV that you submitted for this case, correct?

9 A. That's correct.

10 Q. All right. And I am trying to understand the  
11 reasons that you would omit a grant when you have a list  
12 of grants -- I'm sorry. Your answer when you were asked  
13 by counsel about that was that you didn't think it fit in  
14 with the other grants that were given or you didn't think  
15 it fit in with this type case? I am trying to look for  
16 clarification.

17 A. The primary reason was that it doesn't fit the  
18 category of the other grants I have on my Vitae. In all  
19 of those other grants there is a competitive application  
20 process. You submit a proposal. They decide whether or  
21 not they want to fund it, and then you receive the money.

22 Q. Okay. But you included that in your CV that you  
23 submitted on the Bassett case here in this same  
24 courthouse, correct?

25 A. That is not correct.

1       **Q.** No?

2       **A.** It was included as part of a preliminary CV. Oh,  
3 actually -- okay. Sorry. Let me back up. I might have  
4 included it as part of the Bassett case.

5       **Q.** And the Bassett case, what did that deal with?

6       **A.** This deals with -- so my particular testimony is  
7 about two things: One, whether or not people respond to  
8 incentives when deciding whether to marry; and, two,  
9 whether or not marriage confers benefits to the State of  
10 Michigan.

11       **Q.** But that case though, the content of that case or I  
12 should say what the case was about, was about whether or  
13 not the state could deny domestic partnership benefits to  
14 state employees, correct?

15       **A.** That's correct.

16       **Q.** Okay. And so not so very much different from what  
17 we are here about today in terms of whether or not same  
18 sex couples should be able to marry and jointly adopt.  
19 Pretty much the same category in terms of cases, correct?

20       **A.** Yes. I mean --

21                   **MS. BRYA:** Objection, your Honor. I think  
22 that is not for him to give his opinion as to whether or  
23 not that case is relevant to this one.

24                   **THE COURT:** He was just getting ready to  
25 explain the case.

*12=1-285; April Deboer, et al. v. Richard Snyder, et al.*

1       **A.** Yes. So from my perspective in terms of the  
2       empirical work that I described, they are actually quite  
3       different. I wouldn't be able to comment on how similar  
4       the legal issues are. But they both involve same sex  
5       couples.

6       **Q.** I'm just trying to understand why it was relevant to  
7       submit in the Bassett case but then it comes off your CV  
8       when you come to testify as an expert in this particular  
9       case?

10      **A.** Yes. And so I will be super clear with you. The  
11      two reasons are: One, I mean, the primary reason is it's  
12      not a grant in the traditional sense of all of the other  
13      grants. It's actually a much smaller amount. There is a  
14      competitive process. There was a reimbursement for the  
15      wages of my students. But, second, as I mentioned in the  
16      deposition, it was also motivated by the fact that the  
17      Witherspoon Institute received a lot of negative publicity  
18      as a result of the Regnerus study.

19      **Q.** How you edited your CV basically was predicated on  
20      what you thought would look good or look bad when you were  
21      presented as a witness, correct?

22      **A.** That would certainly be part of the reason, yes.

23      **Q.** Okay. All right. And you indicated that you are  
24      associated with an organization called the Austin  
25      Institute, correct?

1       **A.** Correct.

2       **Q.** And the person who invited you to serve as a Fellow  
3 there was Mark Regnerus?

4       **A.** Correct.

5       **Q.** Now, I'm sorry. Explain again because I wasn't clear  
6 on your answer. The Austin Institute, its purpose is  
7 what?

8       **A.** I don't know. I mean --

9       **Q.** I'm sorry. Did you say I don't know?

10      **A.** I don't know.

11                   **MS. BRYA:** Your Honor, I think it calls for  
12 speculation.

13                   **THE COURT:** He can answer. He said I don't  
14 know, and he was going to explain why.

15      **A.** So what I can explain is what I have been asked to  
16 do as part of the Austin Institute. And what I have been  
17 asked to do is on occasion write a blog post that takes  
18 something from the research community and translates it  
19 into something that the public can use. And the one blog,  
20 the only blog I have done to this point was about the  
21 agricultural roots of gender roles. My next blog, I don't  
22 know what I will do that, but I will probably talk about  
23 whether it's appropriate for parents to encourage  
24 incentives for children.

25      **Q.** Being a Fellow of the Austin Institute, is that a

1 paid position?

2 A. I received a two thousand dollars stipend.

3 Q. Who funded the Austin Institute?

4 A. I actually don't know.

5 Q. Okay. Now, you're getting paid for your testimony  
6 in this case, correct?

7 A. That's correct.

8 Q. And what is your hourly fee that you're being paid?

9 A. So I charge \$300 an hour for time spent, either  
10 being deposed or preparing or being here in the courtroom.

11 Q. Does that roughly translate to what your salary is  
12 at BYU? Your hourly rate?

13 A. It would be higher than my hourly rate at BYU.

14 Q. A lot higher than your hourly rate, correct?

15 A. That's correct.

16 Q. All right. And with you having done the expert  
17 report and being deposed and now testifying at trial, what  
18 is the total amount that you expect to be paid for your  
19 participation in this case?

20 A. I haven't crunched the numbers, but, I don't know.  
21 It might be \$15,000.

22 Q. Okay. Paid to you by the State of Michigan,  
23 correct?

24 A. That's correct.

25 Q. Now, Doctor Price, is it fair to say you know a lot

1 about the benefits of marriage, correct?

2 **A.** I don't know what you mean by a lot, but I have done  
3 research on the benefits of marriage.

4 **Q.** When I say a lot, I mean, you have written a chapter  
5 and a book that was published on this topic, correct?

6 **A.** Well, the chapter that I wrote in a book was about  
7 things that influence people to become married. That's  
8 not necessarily about the benefits of marriage but it's  
9 clear that people respond to incentives when deciding to  
10 marry.

11 **Q.** In your book though you acknowledge that marriage is  
12 associated with a number, a high number of positive  
13 outcomes, correct?

14 **A.** Again, that was, you know, one paragraph in the  
15 paper and it is similar to what I explained earlier is  
16 that often will include a set of reasons why we think  
17 marriage might be important or why family structure might  
18 be important.

19 **Q.** All right. Well, let's go some of those positive  
20 outcomes that you cite in the paper that result in people  
21 getting married. You know, married people, you say, live  
22 longer, correct?

23 **A.** Correct.

24 **Q.** Married people engage in fewer riskier behaviors,  
25 correct?

1       **A.** That's correct.

2       **Q.** Married people earn more money, correct?

3       **A.** Correct.

4       **Q.** People who are married have better child outcomes  
5 for the children they are raising, correct?

6       **A.** Correct.

7       **Q.** Marriage has a positive impact on both the  
8 individuals who are married and their children?

9       **A.** That is correct.

10      **Q.** All right. People behave better when someone with  
11 power to reward or sanction is watching and marriage  
12 provides a situation in which there is someone watching  
13 much of the time. You said that, correct?

14      **A.** That's correct.

15      **Q.** All right. The institution of marriage comes with  
16 expectations, obligations, and social sanctions against  
17 certain behaviors, correct?

18      **A.** That's correct.

19      **Q.** And marriage facilitates a wide net of social bonds  
20 involving the extended families and friends of both  
21 individuals in the marriage, correct?

22      **A.** That's correct.

23      **Q.** Marriage provides legal access to the partner's  
24 resources and a system of which each individual in the  
25 marriage can take advantage of economies of scale,

1 correct?

2 **A.** Correct.

3 **Q.** What does that mean, economies of scale?

4 **A.** So, economies of scale just means that it's cheaper  
5 to take care of the needs of two people together than it  
6 would be to take care of the needs of those two people if  
7 they lived separately.

8 **Q.** And that's why that is a benefit of being married,  
9 correct?

10 **A.** Yes.

11 **Q.** All right. The Federal Government uses marriage as  
12 a mechanism for rights and protections such as Social  
13 Security, correct?

14 **A.** I don't know that exactly.

15 **Q.** You don't know about Social Security and whether the  
16 Federal Government --

17 **A.** I don't actually.

18 **Q.** Okay. So then you don't know, as an economist you  
19 don't know if Social Security is an important economic  
20 safety net for families in this country and seniors?

21 **A.** I do know that Social Security is an important  
22 safety net in this country.

23 **Q.** Okay. Now, I think you mentioned earlier in your  
24 testimony, I think you cited in some of your papers, are  
25 you familiar with the work of Gary Gates?

1       **A.** The work of Gary Gates? Yes.

2       **Q.** Okay. He is a well known demographer with a special  
3 expertise in the LGBT community, correct?

4       **A.** That's correct.

5       **Q.** Right. And you, yourself, you reviewed census data  
6 on same sex couples and their children here in the United  
7 States, correct?

8       **A.** That's correct.

9       **Q.** And have you also reviewed data as it pertains to  
10 Michigan specifically?

11       **A.** Of same sex couples in Michigan?

12       **Q.** Right. How many same sex couples live in Michigan.  
13 How many are raising children in Michigan. That type of  
14 thing?

15       **A.** No. I've never broken any data down by state.

16       **Q.** Okay. But you do know, don't you, Doctor, that same  
17 sex couples are raising children in all 50 states of our  
18 nation?

19       **A.** I wouldn't be surprised.

20       **Q.** That doesn't surprise you?

21       **A.** That doesn't surprise me.

22       **Q.** Okay. Even the states that don't have marriage  
23 equality, there are same sex couples raising kids.

24       **A.** Yes.

25       **Q.** Okay. And even the states that don't allow for

1 joint or second party adoption for same sex couples such  
2 as is Michigan, still you have same sex couples raising  
3 children, correct?

4 **A.** That's correct.

5 **Q.** Okay. And you would concede, would you not, sir,  
6 that gays and lesbians would likely continue to have  
7 relationships and form couples regardless of whether that  
8 relationship is recognized by law or not?

9 **A.** I mean, I don't know if I said that, but I imagine  
10 it's true.

11 **Q.** And you also would concede that these couples, even  
12 if it's not sanctioned by law specifically, they would go  
13 on to individually adopt children or they will have  
14 children through artificial insemination or surrogacy or  
15 some other means?

16 **MS. BRYA:** Your Honor, I object as to  
17 speculation.

18 **THE COURT:** I don't know where we are going  
19 but he may answer that.

20 **A.** I wouldn't see any reason why they wouldn't. I  
21 imagine they would do that.

22 **BY MS. NESSEL:**

23 **Q.** But it's these families, the ones that where  
24 marriage is not available to them, between the adults, and  
25 where joint adoption is not available, these couples and

1     their children are going to be worse off because they  
2     don't have the legal protection that you say benefits  
3     people who get married, right?

4                   **MS. BRYA:** Your Honor, I would object to that  
5     as it relates to the legal --

6                   **THE COURT:** From an economics standpoint he  
7     can testify, but not from a legal, if he has an opinion.

8     **A.** So all I can really speak to is that all of those  
9     statements you made about marriage we have learned based  
10    on heterosexual marriage. And I wouldn't be the type of  
11    expert that can speak to whether they would transfer over  
12    to same sex couples.

13 **BY MS. NESSEL:**

14     **Q.** As an economist, I mean, when you look at all of  
15    these different factors that you clearly have studied in  
16    terms of heterosexual marriages, the ones that we just  
17    spoke about -- economies of scale, and people living  
18    longer, and people earning more money and so forth, if  
19    those apply to heterosexuals who are married, why would  
20    they not apply to same sex couples the same way? Why  
21    would it be different for them just because they both  
22    happen to be of the same gender rather than opposite  
23    genders?

24     **A.** I mean, I wouldn't be able to give you a definitive  
25    answer. But one explanation that has been cited in the

1 literature is that most the gains to marriage operate  
2 through men changing their behavior. So women have a  
3 domesticating effect on men. And this is clear when you  
4 look at the changes in risky behavior or earnings. It's  
5 primarily operating through men changing their behavior.  
6 And so that would be one explanation is that. But, again,  
7 I don't have any definitive answer. If you had to push me  
8 to provide an explanation, that would be one explanation,  
9 that women have a positive effect on men.

10 Now, so women could then have a positive effect  
11 on other women. What I don't know is if men have a  
12 positive effect on other men. If you look at some  
13 behavior in fraternities or gangs, it's not clear if men  
14 have that same kind of domestication.

15 Q. Are you comparing the marriage between two men to be  
16 the same as a fraternity or a gang?

17 A. No. I'm just saying these are situation in which men  
18 are brought together and their behavior affects each  
19 other's behavior.

20 Q. I see. So do you have any reason as an economist to  
21 believe that families that are raising kids, same sex  
22 couples where they don't have the right to get married and  
23 they don't have the right to jointly adopt, do you have  
24 any reason to think that they would be worse off and their  
25 children would be worse off if they married?

1       **A.** I don't have any reason to believe that.

2       **Q.** Okay. And, in fact, by all of these predictors,  
3 such as, for instance -- strike that. The economies of  
4 scale, why would economies of scale be any different  
5 between a man and a woman and two men and two women? It  
6 would affect all three groups exactly the same, correct?

7       **A.** Yes. But in that case it's not clear why it would  
8 differ between whether or not you are married. I mean,  
9 economies of scale will operate if you are living  
10 together. So --

11       **Q.** Wouldn't it also for heterosexuals?

12                   **MS. BRYA:** Your Honor, I ask that he be  
13 allowed --

14                   **THE COURT:** You have to let him finish his  
15 answer.

16                   **MS. NESSEL:** I understand.

17       **A.** With the specific example of economies of scale it's  
18 not clear if that particular explanation differs anything  
19 between cohabiting and married. But, again, I mean, you  
20 are talk specifically about economies of scale. That one  
21 I don't know. That is just about when two people live  
22 together their expenses are less than when they are living  
23 separately.

24       **Q.** I'm just not clear because you say in your book, and  
25 again, I will quote it -- marriage provides legal access

1 to the partner's resources in a system in which each  
2 individual in the marriage can take advantage of economies  
3 of scale. So you don't say in cohabitation. You say in  
4 marriage.

5 **A.** Yes. So what I'm saying is that that is one of the  
6 benefits of moving from singlehood to married.

7 **Q.** And it would benefit from single to married whether  
8 or not it was an opposite sex relationship or whether it  
9 was a same sex relationship, correct?

10 **A.** But, again, I'm saying in that chapter I'm talking  
11 about, these are some of the benefits of moving from  
12 singlehood to marriage. And actually some of those  
13 benefits you're going to obtain by moving into a  
14 cohabiting union.

15 **Q.** But that's not the way you have it phrased in your  
16 book. You don't say cohabitation. You say married, right?

17 **THE COURT:** Ask the question. What is the  
18 question?

19 **BY MS. NESSEL:**

20 **Q.** The question is, why would you use the term, or I  
21 should say, the word, married, and not cohabitating when  
22 you are writing a book where you talk about positive  
23 outcomes of marriage? Why not call it positive outcomes  
24 of cohabitation?

25 **A.** No. Because the whole chapter, that whole handbook

1 chapter is looking at policies that have changed people's  
2 decisions of whether or not to marry. Hence they are  
3 moving from a state of not being married to being married.  
4 And I'm just saying that these are some of the reasons why  
5 when people marry, they accrue positive benefits. In that  
6 chapter I was focused primarily on this distinction  
7 between marriage and not marriage. And all I'm saying is  
8 that some of those benefits could operate through  
9 cohabitating couples or civil unions or other  
10 arrangements. I don't really have anything specific to  
11 say to that.

12 Q. Did you do a separate analysis that just involved  
13 cohabitating partners versus people who are legally  
14 married?

15 A. No. Because all of the studies in that article you  
16 are referring to, I'm reviewing the work in that done by  
17 other people. In all of those other articles, the  
18 comparison that they were making was, are you married or  
19 are you not married?

20 Q. And there was no room for cohabitation there?

21 A. No. Because most of these articles that I reviewed,  
22 we are looking at law changes that created either an  
23 incentive or disincentive for people to marry.

24 Q. And those laws that create incentives or  
25 disincentives to marry, those would apply to same sex

1 couples as well as opposite sex couples in the event that  
2 same sex couples were permitted to marry, correct?

3 **MS. BRYA:** Objection, again, your Honor. I  
4 don't know that he can testify to what the law is going to  
5 say.

6 **A.** I don't know. All the articles were focused  
7 primarily on heterosexual marriage.

8 **BY MS. NESSEL:**

9 **Q.** But you don't have any reason to believe that those  
10 laws, if people marry to get protection of those laws, you  
11 wouldn't have any reason to believe that they would affect  
12 people differently just because it's a same sex couple  
13 versus an opposite sex couple that is seeking to get  
14 married and be protected by those laws, correct?

15 **MS. BRYA:** Your Honor, objection. I think she  
16 asked and he has answered the best he can.

17 **THE COURT:** He can answer it.

18 **A.** I don't know.

19 **BY MS. NESSEL:**

20 **Q.** Let's talk about your Rosenfeld critique. And I  
21 have to concede I am a little confused by it. I wonder if  
22 you can do an analysis where you state it this way? Are  
23 you able to give us figures in terms of -- for a hundred  
24 children, out of a hundred children, how many of them --  
25 and you were talking about in the study how many kids go

1 from one grade to the next, correct?

2 A. Yes.

3 Q. And it's second grade and third grade?

4 A. You mean, how many kids are held back in school?

5 Q. Well, is that the grade you are talking about when  
6 you are trying to do an analysis of what grade they are  
7 held back from?

8 A. So we don't know what grade they were held back  
9 from. What we know is that when they reach a certain age  
10 they have been held back prior to that.

11 Q. So out of a hundred children, say, what percentage,  
12 don't even use the hundred figure, what percentage of  
13 married -- the children of married heterosexuals were held  
14 back in school according to your analysis? Not  
15 Rosenfeld's. We have heard from him. But in your  
16 analysis, what percentage were held back?

17 A. So, again, I didn't frame it in those terms. I  
18 framed everything in terms of the odds ratio which is the  
19 probability that -- the increased probability that  
20 something happens.

21 Q. Okay. But when you say increased probability, for  
22 instance, you can't tell us specifically how many kids  
23 that is then out of a hundred kids would be held back --

24 A. Again --

25 Q. -- for each category? I'm trying to understand how

1 many kids we are talking about. Are we talking about the  
2 difference between one child between married heterosexual  
3 parents and opposite sex parents? Are we talking about  
4 half a kid? Are we talking about a quarter a kid? I  
5 mean, how big is this ratio?

6 **A.** Again, I wasn't able to show -- I mean, the two --  
7 there were a table, two tables that I was going to show  
8 that I wasn't able to show.

9 **Q.** Can you explain?

10 **A.** Yes, sure. So, in the Rosenfeld study, he's using  
11 all of the children between ages 5 through 17. And as I  
12 pointed out, the only ages for which you can accurately  
13 measure whether or not you have been held back is age 11  
14 and 15. And so one thing you can do is you can actually  
15 take the analysis and just run that analysis on kids that  
16 are either 11 and 15. And what you find if do you that is  
17 you find that the results are even larger than what I  
18 showed you before. And they are statistically significant  
19 even using the sample restrictions that Rosenfeld did.  
20 So, again, part of the reason --

21 **Q.** Hold on. I'm sorry. I think you answered my  
22 question. Let me ask you this.

23 **MS. BRYA:** Your Honor, I'm going to object to  
24 that. I think he should have an opportunity finish his  
25 answer. She asked it.

1                   **THE COURT:** That's fine. Go on. Move on.

2       He should be permitted to finish. Go on.

3 **BY MS. NESSEL:**

4       **Q.** On Direct Examination you said that 2 percent of all  
5 kids in the study were held back, correct?

6       **A.** Again, that number is diluted by the fact that none  
7 of the nine year olds were held back because if you are a  
8 nine year old, we do not know if you have been held back.

9       **Q.** But you said -- that was the phrase you used.  
10 2 percent of all kids are held back. Did you not say that  
11 specific statistic?

12       **A.** I was doing that in the context of Rosenfeld's table  
13 and I was pointing that in the data, 2 percent of the kids  
14 are coded as having been held back. Now, Rosenfeld  
15 acknowledges that that is an underestimate because of the  
16 measurement error problem. So the way he corrects for it  
17 is he just multiplies that number by four. I think  
18 another way you can do it is just restrict the sample to  
19 those ages for which you have reasonably good information  
20 which is 11 and 15 year olds.

21       **Q.** All right. For my information then, what percent of  
22 all kids are held back?

23       **A.** Again, I don't have that number readily available.  
24 You could calculate it using the table.

25       **Q.** In real numbers we are talking about the difference

1 between out of a hundred children, okay, that 98 of those  
2 children will pass on to the next grade versus in other  
3 categories what? 98 and a half? When you say that there  
4 is a substantial likelihood higher that a child would not  
5 pass on to the next grade from one category to the next,  
6 we are really talking about the difference between 98 kids  
7 out of a hundred versus what? 97 and a half kids out of a  
8 hundred? I mean, we are not talking about the difference  
9 between ten kids.

10 **THE COURT:** Give him a question.

11 **A.** Maybe ask the question.

12 **BY MS. NESSEL:**

13 **Q.** How many kids are we talking about per 100 kids that  
14 total will move on to the next grade?

15 **MS. BRYA:** Your Honor, I object to that. She  
16 asked and he told her he can't calculate that unless he  
17 has a few minutes to do it.

18 **A.** So I do have two tables in my slide I can use to  
19 calculate it if you want. I don't have that number. I  
20 couldn't provide that number without doing a calculation  
21 off those tables.

22 **Q.** Do my figures then presented to you, do those sound  
23 correct between 97 and a half versus 98 kids between the  
24 categories?

25 **MS. BRYA:** Your Honor, I'm going to object.

1 I think he answered.

2 **THE COURT:** He hasn't doesn't the numbers.

3 He doesn't know.

4 **BY MS. NESSEL:**

5 **Q.** When you say twice as much we are talking about  
6 figures that are that small, correct? You were going to  
7 use that?

8 **THE COURT:** You're not talking about actual  
9 people or things. You're talking about statistical.

10 **THE WITNESS:** I am talking about an increase  
11 in the probability of something happening. So I think  
12 like if I were to tell a parent there is a 30 percent  
13 higher chance that X will happen, that would catch their  
14 attention.

15 **BY MS. NESSEL:**

16 **Q.** But I think what you said, the percentage that you  
17 used earlier regarding same sex couples and their  
18 children, that they had a 15 percent greater risk of being  
19 held back, is that the number you used?

20 **A.** Tell me what comparison you are talking about.

21 **Q.** Versus same sex couples -- their children versus  
22 married heterosexuals and their children.

23 **A.** Again, I would have to look at the slide, but it's  
24 more in the range of 30 percent.

25 **Q.** So when you say more in the range of 30 percent, I

1 mean, I am trying to get basic numbers. Are we talking  
2 about the difference between, you know, 30 kids passing on  
3 to the next grade versus 60 kids passing on to the next  
4 grade? Or are we talking about the difference between 97  
5 and a half percent of kids passing on to the next grade  
6 versus 98 percent of the kids passing on to the next  
7 grade?

8 **MS. BRYA:** Your Honor, I'm going to object.  
9 Again, we have gone over this and I think he said he  
10 doesn't have the answer.

11 **THE WITNESS:** If you would like me to show  
12 the tables, I can answer your question. I just can't  
13 answer the question.

14 **MS. NESSEL:** Hold on a second, Doctor Price.

15 **BY MS. NESSEL:**

16 **Q.** Doctor Price, you indicated that that event, a child  
17 not passing on to the next grade, is a rare event?

18 **A.** It's a rare event.

19 **Q.** That's why you need to have such large data samples  
20 for this because it happens so infrequently?

21 **A.** Well, again, part of the reason we get that number  
22 like 2 percent is because we only get to observe it for  
23 two age groups. When you do the same factor like  
24 Rosenfeld did, it's maybe more like eight percent.

25 **Q.** Children not passing on to the next grade happens

1 infrequently, whether it's an opposite sex couple's child  
2 or a same sex couple's child, correct?

3 **A.** That's true. But to clarify --

4 **THE COURT:** That's okay.

5 **THE WITNESS:** Okay.

6 **BY MS. NESSEL:**

7 **Q.** All right. And so in looking at Rosenfeld's  
8 measurements that he did and evaluating that, as you  
9 indicated, you said that same sex couples you said have  
10 noticeably worse outcomes than children raised by a father  
11 and mother, correct?

12 **A.** That's correct.

13 **Q.** And, again, you are looking at normal progress in  
14 school?

15 **A.** That's correct.

16 **Q.** All right. And you selected that measure because  
17 you were taking what Rosenfeld did and you wanted to make  
18 some changes to it. You felt as though it required  
19 changing some of the factors that Rosenfeld used, right?

20 **A.** Maybe if you can clarify what you mean by factors.  
21 I tried not to change any of his control variables. I  
22 didn't change his outcome variables.

23 **Q.** But you did change some of the things in the study  
24 obviously?

25 **A.** I made two small changes. One is completely

1 innocuous. I just changed the reference group. That does  
2 not do anything to the data. And the second is that I  
3 took a reasonable step of including a broader set of  
4 children in the analysis rather than eliminating them from  
5 the sample.

6 Q. And even when did you those things, Doctor Price,  
7 you actually -- you were unable to reject the hypothesis  
8 that there is no difference between the outcomes of  
9 children of same sex couples and heterosexual married  
10 parents, correct? Did you use that language?

11 A. If you can repeat that? I don't think that is  
12 correct. But if you can state it.

13 Q. Well --

14 A. Again, I showed you --

15 Q. I understand. Do you have the study in your hands  
16 right now?

17 A. Yes. I can pull it up.

18 Q. Can you turn to page 958 of your study? That's not  
19 the correct page. All right. Directing your attention to  
20 page 958 of your study. Can you take a look at? You have  
21 a graph and then you have a paragraph underneath that  
22 graph, correct?

23 A. Yes.

24 Q. Can you please take a look at the last line of your  
25 study or your critique of Rosenfeld's study?

1       **A.** Correct.

2       **Q.** What you say in that analysis is, while we are  
3 unable to reject the hypothesis that there is no  
4 difference, this approach also makes it impossible to rule  
5 out very large differences. That's what you said, right?

6       **A.** That's correct.

7       **Q.** So there could be large differences?

8       **A.** Yes.

9       **Q.** But there could be no difference at all?

10      **A.** That's true. Both of those statements --

11                   **THE COURT:** Closer to the microphone.

12      **A.** I'm sorry. Both of the those statements are within  
13 the Confidence Interval.

14 **BY MS. NESSEL:**

15      **Q.** But your testimony though in this case based on that  
16 study supports a conclusion that children raised by same  
17 sex couples have noticeably worse outcomes than raised by  
18 a father and mother. That is what you testified to,  
19 correct?

20      **A.** Yes. And my testimony is based primarily on the next  
21 table which is table three.

22      **Q.** When you talk about children raised by same sex  
23 couples having noticeably worse outcomes, you're talking  
24 about averages, right?

25      **A.** That's correct.

1       **Q.** And you agree that some children raised by same sex  
2 couples have better outcomes than children raised by a  
3 mother and father, a married mother and father, I should  
4 say?

5       **A.** Yes. I would agree that is true in general. In this  
6 case, you have a binary variable. And so you are either  
7 held back or not held back. So there is lots of kids in  
8 both groups that are not held back. All we are saying is  
9 that the probability that a child is held back is higher  
10 for some family types than it is for others.

11       **Q.** And you certainly don't know specifically about the  
12 parenting capabilities of the plaintiffs in our case,  
13 April and Jane, correct?

14       **A.** I don't.

15       **Q.** So whether or not the state has stipulated to them  
16 being good parents, you are not aware of that?

17       **A.** I don't know.

18       **Q.** All right. Now, you also said you rely on Potter to  
19 support your conclusion that children raised by same sex  
20 couples have noticeably worse outcomes than children  
21 raised by a father and mother, right?

22       **A.** I point out that there is different ways to  
23 interpret the results from his paper.

24       **Q.** You said Potter compares the outcome, is this right,  
25 on math test scores for K through 8 children in married

1 two biological parent households than children of same sex  
2 parent families? Is that correct?

3 A. That's correct.

4 Q. You said that in your report, right?

5 A. Yes.

6 Q. And the Potter study is good because he uses, I  
7 think these were your words, a data set with a rich set of  
8 measures of the child's family background in their  
9 performance in school. Right?

10 A. Yes.

11 Q. Okay. Now, with the Potter study, once he included  
12 controls for family structure in kindergarten as well as  
13 the cumulative number of family transitions, does he not  
14 find that the gap, the math test score gap between those  
15 two groups disappears completely and is no longer  
16 statistically significant at all? That's correct, isn't  
17 it?

18 A. It requires a little bit of further interpretation.  
19 I mean, the nice thing about the Potter paper is he shows  
20 it all three ways. And you see large differences. It's  
21 about a sixth of a standard deviation. He includes the  
22 controls. It drops to about half. He includes controls  
23 for family transitions and it goes away. The thing that  
24 is a bit --

25 Q. I'm sorry. There is no question on the table.

1                   **MS. BRYA:** Yes, there is, your Honor. She  
2 asked him a question.

3                   **THE COURT:** You asked him a question.

4           **A.** The thing that is odd about this table is that same  
5 approach also shows that children being raised by a single  
6 mother have statistically significant better outcomes than  
7 children being raised by two biological married parents.

8           **Q.** I'm sorry. From what component are you taking that  
9 from?

10          **A.** In the Potter table you are referring to, if you  
11 look at the co-efficient on single mother, you will see  
12 that's positive and statistically significant. And so,  
13 again, if I were the reviewer of this paper, this would  
14 raise some concerns.

15          **Q.** And that's why it's important for you to take into  
16 consideration things like whether it's a single parent  
17 family, whether it's a step-family, things of that nature,  
18 correct? They play a role in all that?

19          **A.** All I am saying is his empirical method is a little  
20 different than the way I would approach it. He's  
21 controlling both for your family status at kindergarten.  
22 He's including a control for how many family transitions  
23 you've experienced. And then he's focusing on the  
24 co-efficient on your current family status. It just makes  
25 it very difficult to interpret his main results that he is

1 discussing and it leads to this odd puzzle that children  
2 raised by single mothers are doing statistically  
3 significant better than what we would think of as the  
4 ideal family type.

5 **Q.** And you rely and Potter's study though in forming  
6 your conclusions, right?

7 **A.** I use the first two columns in which he is  
8 conducting an analysis very similar to the way Rosenfeld  
9 set up his study. It's only in the third column that  
10 these kind of puzzling things start to emerge. And I  
11 think it's largely driven by the way he set up his  
12 empirical specification. And actually I don't think -- I  
13 wouldn't consider that third column as being the standard  
14 approach to estimating differences based on family  
15 structure.

16 **Q.** You talked about the Rosenfeld --

17 **THE COURT:** I have a question. Do you have a  
18 lot more to go through?

19 **MS. NESSEL:** I probably do, your Honor.

20 **THE COURT:** You do. Okay. No use -- if we  
21 have to come back -- I was hoping we could finish tonight.

22 **MS. NESSEL:** I think we have to come back.

23 **THE COURT:** If you have more than that, we  
24 have to reconvene in the morning. So we will stand in  
25 recess until 9:00 tomorrow morning. Okay.

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**C E R T I F I C A T I O N**

I, Lawrence R. Przybysz, official court reporter  
for the United States District Court, Eastern District of  
Michigan, Southern Division, appointed pursuant to the  
provisions of Title 28, United States Code, Section 753,  
do hereby certify that the foregoing is a correct  
transcript of the proceedings in the above-entitled cause  
on the date hereinbefore set forth.

I do further certify that the foregoing  
transcript has been prepared by me or under my direction.

s/Lawrence R. Przybysz  
Official Court Reporter

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