

Evaluating Barriers to Accessing Parenting Education Services

by
Kiana Alexis Barr

A THESIS

submitted to

Oregon State University

Honors College

in partial fulfillment of
the requirements for the
degree of

Honors Baccalaureate of Science in Human Development and Family Sciences
(Honors Scholar)

Honors Baccalaureate of Science in Public Health
(Honors Scholar)

Presented November 20, 2019
Commencement June 2020

AN ABSTRACT OF THE THESIS OF

Kiana Alexis Barr for the degree of Honors Baccalaureate of Science in Human Development and Family Sciences and Honors Baccalaureate of Science in Public Health presented on November 20, 2019. Title: Evaluating Barriers to Accessing Parenting Education Services.

Abstract approved: _____

Shauna Tominey

The relationship between a parent and child in the first years of life have a significant effect on the development of children. Parenting education can be a valuable resource for learning evidence-based parenting strategies, but access to parenting education is limited in many states. Oregon has a unique statewide system to support parenting education, called the Oregon Parenting Education Collaborative (OPEC). Although OPEC offers parenting education classes across the state, many people experience barriers to participating. The data from a survey of 6,581 parents was analyzed to understand what barriers were most commonly reported, how many barriers parents experienced, and what factors predict the numbers of barriers. The study found that although the majority of participants did not indicate any barriers. The 40% who did mostly commonly expressed “time” as a barrier. Parents who identify as Hispanic, low-SES parents and those parenting with other relatives in the home had the greatest odds of experiencing barriers.

Key Words: parenting education, Oregon Parenting Education Collaborative, barriers to access

Corresponding email address: kianabarr@gmail.com

©Copyright by Kiana Alexis Barr
November 20, 2019

Evaluating Barriers to Accessing Parenting Education Services

by
Kiana Alexis Barr

A THESIS

submitted to

Oregon State University

Honors College

in partial fulfillment of
the requirements for the
degree of

Honors Baccalaureate of Science in Human Development and Family Sciences
(Honors Scholar)

Honors Baccalaureate of Science in Public Health
(Honors Scholar)

Presented November 20, 2019
Commencement June 2020

Honors Baccalaureate of Science in Human Development and Family Sciences and Honors Baccalaureate of Science in Public Health project of Kiana Alexis Barr presented on November 20, 2019.

APPROVED:

Shauna Tominey, Mentor, representing Human Development and Family Sciences

Megan Pratt, Committee Member, representing Human Development and Family Sciences

Anne Mannering, Committee Member, representing Human Development and Family Sciences

Toni Doolen, Dean, Oregon State University Honors College

I understand that my project will become part of the permanent collection of Oregon State University, Honors College. My signature below authorizes the release of my project to any reader upon request.

Kiana Barr, Author

I. INTRODUCTION

The relationship between a parent or caregiver and child is one of the most fundamental connections a child should form in their early years and beyond.^{1,2} A strong attachment with a trusted, caring adult in childhood has been shown to promote children's abilities in all aspects, from social and emotional to physical and cognitive development.³

Although many people will be a parent in their lifetime, many people will not have access to parenting education programs that support learning positive and research-supported skills that will help them make the most healthy and informed choices.⁴ In essence, parenting is a skill that can be taught and not necessarily an inherent ability. In Oregon, a system has been developed to provide families across the state with access to parenting education: Oregon Parenting Education Collaborative (OPEC).⁵

The goal of OPEC is to provide high-quality parenting education and support, and coordinate parenting education efforts around the state. OPEC also strives to provide best practices to support parenting education services, such as offering classes for free, providing free childcare and family meals in order to allow more families to access this important service.⁵

Despite the efforts OPEC makes to allow as many families as possible to attend their education events, there may be barriers that exist to families participating. Some families may be experiencing measurable and tangible barriers to access that could be addressed. If we are able to understand who is affected and by what barriers, OPEC can take informed steps to minimize these obstacles in order to better serve families. The first step, completed 2010-2018, was conducting a survey of over 6,000 parents across the state in regions where an OPEC Hub was being established. In this study, we will use that data to answer the following research questions:

- *Q1a) What types of barriers are reported in response to a series of multiple choice options?*
- *Q1b) What types of barriers are reported in participants' qualitative responses?*
- *Q1c) Did participants experience more than one barrier to access?*
- *Q2a) What factors predict the presence or absence of barriers?*
- *Q2b) What factors predict the number of barriers?*

By answering these questions, we will gain a better understanding of the challenges parents may face when considering whether or not to attend parenting education classes. Using this information, we hope that barriers can be reduced and more families can have access to this all-important educational opportunity.

II. LITERATURE REVIEW

Parenting education is important because it provides evidence-based skills that parents can practice and apply in their own families. It is important that it is founded on sound research that has been shown to increase positive outcomes for children and families.^{6,7} Research shows that evidence-based programs which are longer in duration (e.g., 10-14 weeks) are most likely to lead to lasting effects.⁸ Some positive outcomes that have been shown from studies on parenting education include an increase in positive, authoritative-based parenting practices, increased mental health outcomes and increased cognitive outcomes.^{7, 9, 10} Parenting education may also help decrease child behavior problems, stress on parents, and, in extreme cases, abuse of children.^{8, 10}

Although parenting styles and practices can differ greatly across groups, such as by class or ethnicity, all parents have ways of nurturing, teaching and disciplining their children. Research shows that different demographic factors can predict various parenting related behaviors that are known to be associated with development or school readiness.¹¹ It is important that those providing can identify the unique needs of each community.¹² Research shows that by providing parenting education services that enhances the strengths of communities or cultures, children show positive outcomes in development and school-readiness after intervention.¹²

Gaps in economic status can also affect children's learning outcomes in early childhood. According to the Washington Center for Economic Growth, "at age four, children from families in the poorest income quintile score on average at the 32nd percentile of the national distribution on math, the 34th percentile in a test of literacy, and at the 32nd percentile on a measure of school readiness compared with children in the richest quintile, who scored at the 69th percentile on math and literacy and at the 63rd percentile on school readiness."¹³ Parents with greater

economic advantage are more likely to engage their children in behavior that is cognitively stimulating.¹³ This also means that they are more likely to engage their children in emotionally-supportive behavior which can also lead to more positive outcomes.^{12, 13} We know that there are some factors connected to parenting which might affect this. Most directly, parents who have more financial resources are more able to spend money on formalized enrichment activities for their children. They might be able to formally enroll them in tutoring or other academic programs and support. A previous study of parents of at-risk kindergarteners found that “it would cost too much” was one of the mostly highly reported barriers to seeking help for their child’s mental health and problem behavior.¹⁴ Another study of families in rural communities found that lack of transportation and lack of money were also commonly reported barriers to access of social services.¹⁵ Could the experience which comes from previously engaging in these other types of formal programming help make it easier for parents to find information about parenting education classes that meet their family’s needs?

Other factors associated with economic status may play a role such as one- versus two-parent households. Two-parent families are more likely to be economically advantaged, and also have higher levels of parent time investment compared with single parents.¹³ Being the single parent in a family also means that all household tasks fall on the single parent. This could impact the amount of time available for attending classes. Although there are compounding variables that might work together to cause parents to experience more barriers, we will look at both socioeconomic status and if study participants are parenting with a partner in this paper.

The purpose of this study is to understand which of these populations are at greater risk of not being able to access parenting education in Oregon. If any specific demographics both have the most to gain from parenting education and are the most likely to have barriers to accessing it, it is important we know what may be preventing them from coming in order to support their attendance as best as possible.

Oregon Parenting Education Collaborative (OPEC) is a joint effort between The Oregon Community Foundation, The Ford Family Foundation, The Meyer Memorial Trust, The Collins Foundation, and Oregon State University. Established in 2010, OPEC strives to support high-

quality, evidence-based parenting education services across the state of Oregon.⁵ The results of this study have implications for OPEC and will be shared with OPEC Hubs to provide information about families in their communities and regions.

III. RESEARCH QUESTIONS

The current study aims to answer the following questions:

Research Question 1a: What types of barriers to attending parenting education classes are reported in response to a series of multiple-choice options?

First, this question will be examined by looking quantitatively at participants' responses to barriers to access parenting education resources question (e.g. "time", "transportation"). This question will examine how many people indicated that they experienced each barrier or no barriers. This will help us establish which barriers participants most commonly expect to experience. Since research suggests longer length parenting education programs are most effective, I hypothesize that time will be a commonly selected barrier as we know many families are balancing a wide variety of responsibilities and priorities.^{8, 13}

Research Question 1b: What types of barriers are reported in participants' qualitative responses?

Second, we will qualitatively examine the answers provided in the free response line to this question. This will be done by both totaling the commonly reported answers as well as providing an overview of other answers provided that might be consistent with previous data cited in the above literature review. This will help establish what additional gaps OPEC could fill in order to increase the accessibility of services. Since we know that participants all identified as parents, I hypothesize that childcare related barriers will be commonly reported.⁵

Research Question 1c: Did participants experience more than one barrier to access?

This question will try and further understand how people are experiencing obstacles to parenting education services. Do most participants experience only a single barrier to

access? Were there participants who had four, five, or even six barriers to parenting education services? This question will help understand how many participants are experiencing challenges to access. As discussed in the literature review, many of the demographic variables can compound on each other. For example, single parent households might face more challenges related to finding time to attend classes or parenting partner to provide support while attending. For this reason, I hypothesize that surveyed parents will experience more than one barrier.

Research Question 2a: What factors predict the presence or absence of barriers?

Here we will find meaning from these data by understanding what demographic factors can predict if participants experienced barriers. This will help OPEC understand the population they are aiming to serve better if they take steps to minimize barriers by allowing them to use data to inform who might need the most attention. I hypothesize that socioeconomic status will be a predictive the presence or absence of barriers as the research suggests it can connect to other factors such as available time and transportation access which might be more difficult to access for low-income families.¹⁴

Research Question 2b: What factors predict the number of barriers?

Similar to Question 2a, Question 2b will allow us to identify populations who are at the greatest risk of experiencing many or confounding barriers. This can help establish if a specific population is most at risk or in need of measures to overcome these barriers. It could also show that most of the population are similar in their experiences of barriers. I predict similar factors will predict the number of barriers as the presence or absence of barriers in Question 2a.

IV. METHODS

A. PARTICIPANTS

The survey data reflects the responses of 6,581 participants who identified as parents across the state of Oregon. The average age of participants was 34.01 years old (*SD*: 8.35; *range*: 15-75). Of the respondents, 86.7% self-identified as female. A majority of participants, 58.55%, are considered to be of low socioeconomic status (having accessed one or multiple resources for low-income families, such as WIC, Oregon Health Plan or Head Start) and 41.45% are classified as mid- or high-socioeconomic status.

The ethnicity/race demographics of respondents are as follows:

- White = 75.9%
- Hispanic/Latino = 19.53%
- Native American = 3.51%
- Asian/Pacific Islander = 2.16%
- Black/African-American = 1.23%

Respondents were asked to identify what kind of support they have as parents.

- 77.88% were parenting with a partner
- 19.97% were parenting alone
- 2.16% were parenting with other relatives in the same home

Participants were also asked to identify how many children they have. The average number of children was 2.45 (*SD*: 1.27; *range*: 1-7).

They were also asked the ages of the children in their home:

- 80% had at least one child between 0-6 years old
- 48.4% had at least one child between 7-12 years old
- 22.72% had at least one adolescent between 13-18 years old.

B. PROCEDURE

A parenting survey was created as a tool to assess parents' needs by OPEC as part of their strategic planning efforts. OPEC Hubs administered the survey during their first year as a Hub, as they were beginning their efforts to expand parenting education programming in their region. Developed with multiple agencies' input, the survey was designed to assess parent awareness of community resources and their needs related to these parenting resources and support.

The survey was administered by OPEC parenting hubs across Oregon. Surveys were made available in both English and Spanish (Spanish surveys were translated and back translated by native Spanish speakers). While the survey collected demographic data, it did not collect any identifying information. The survey was available in both paper and electronic versions. Participants were recruited using social media, in-person through community events, and through partner agencies. From 2010 to 2018, the survey was used by 15 OPEC Hubs in 33 counties in Oregon and one county in California.

C. MEASURES

Participants were asked to complete a 12-question survey with additional demographic related questions. In addition, parents were asked about barriers associated with participating in parenting education (see Figure 1) and these responses were the focus of Research Question 1a and 1b:

- *(Q1a) What types of barriers are reported in response to a series of multiple-choice options?*
- *(Q1b) What types of barriers are reported in participants' qualitative responses?*

Figure 1 Survey question regarding barriers

If you are interested in parenting education opportunities, but have not participated, what are the reasons? (check <u>all</u> that apply)
<input type="checkbox"/> Can't find a class that meets my/my family's needs
<input type="checkbox"/> Can't find out when and where classes are available
<input type="checkbox"/> Not sure what the classes cover
<input type="checkbox"/> Time
<input type="checkbox"/> Transportation
<input type="checkbox"/> Other _____

A value of “0” indicates a respondent did not check the multiple-choice option. A value of “1” indicates that they did indicate the multiple-choice option. In order to measure other factors that could be associated with parents indicating a barrier to participating in parenting opportunities, conclusions about the participants socioeconomic status were drawn from the background information they provided at the end of the survey. Participants were provided with a list of community resources that they used and were asked to check all the apply (see Figure 2).

Figure 2 Survey question regarding community resources

Please CHECK ALL the community resources that you use:			
<input type="checkbox"/> Child Care	<input type="checkbox"/> Oregon Health Plan	<input type="checkbox"/> Schools	<input type="checkbox"/> Family/Community/Resource Centers
<input type="checkbox"/> Libraries	<input type="checkbox"/> TANF/SNAP	<input type="checkbox"/> Recreation/Parks	<input type="checkbox"/> Health Families/Healthy Start
<input type="checkbox"/> WIC	<input type="checkbox"/> Free/reduced lunches	<input type="checkbox"/> Relief Nurseries	<input type="checkbox"/> Early Head Start/Even Start/ Early Intervention
<input type="checkbox"/> Head Start	<input type="checkbox"/> DHS/Child Welfare	<input type="checkbox"/> Tribal Services	<input type="checkbox"/> Other, specify

For the purpose of this study, participants will be considered “low SES” if they indicated that they used one or more community resources only available to low-income families. These include WIC, Head Start, Oregon Health Plan, Free/reduced lunches and TANF/SNAP (Temporary Assistance for Needy Families/Supplemental Nutrition Assistance Program).

V. ANALYTIC PROCEDURE

Descriptive Statistics

Before beginning data analysis, we first looked at the statistical summary of the variables of interest in this study to become familiar with the population. This included the means and standard deviations of the demographic variables including age of parents, gender of parent, number of children, race, low SES, if they were parenting with a partner (vs. alone or with another relative in the home), and age-group of children.

Research Question 1a: What types of barriers are reported in response to a series of multiple-choice options?

To answer Research Question 1a, we looked at frequency tables of the barriers participants selected in the multiple choice section of Question 8. Through these data we calculated the means of each response.

Research Question 1b: What types of barriers are reported in participants' qualitative responses?

To answer Research Question 1b, we reviewed the qualitative response from Question 8. "If you are interested in parenting education opportunities, but have not participated, what are the reasons?" First, we read through all of the 538 open-ended responses, including translating Spanish responses into English to familiarize myself with the data. We then categorized responses by sorting the data by color coding those who provided the exact same answers. For example, 75 responses included the exact phrase "childcare." Through this we were able to determine a few clear categories such as "work," "childcare," and "cost."

Next, we then went through the data again to find additional responses that would fit into those categories that may not have included these keywords. For example, "I don't have anyone to watch my baby while I take the class" was sorted into "childcare."

Then, we reviewed the remaining responses for other themes. Some of these included "not interested in participating," "currently participating/have participated in the past," and "lack of

awareness about classes.” Many responses included that they had no children or they were grown which formed the category “no kids/grown kids.” Although diverse in their answers or specific conditions, there were also answers that were connected to needs regarding disability or health related barriers for both parents and children. This we formed into a category “disability/mental health.”

There were also various responses that were similar to the multiple-choice answers provided but were either more specific in nature or different enough that we believe they deserve to be examined in the qualitative analysis. These include “location” and “time/schedule.” There were also about 60 responses that were not specific enough or difficult to understand that were calculated in a category of “other.”

Research Question 1c: Did participants experience more than one barrier to access?

We answered this research question by looking at the multiple-choice response frequency statistics. Because “other” was one of the multiple-choice selections and had an open-ended space to write a free response answer, we are able to see if participants experienced one or more additional barriers that were not offered as response options. For quantitative purposes, the “other” barriers category was considered one additional barrier when calculating the total number of barriers a participant selected.

First, we looked at the statistics for those who responded to any barrier and those who selected no barriers. This gave us a basic understanding of how much of the population was experiencing barriers to begin with. We then looked more specifically at the barrier totals for participants. This calculation showed how many people experienced none of the barriers and is presented in the form of both by percent, cumulative percent, and frequency.

Research Question 2a: What factors predict the presence or absence of barriers?

To answer Question 2a, we ran a logistic regression using Stata 15 looking at variables that we hypothesize could predict if participants reported any barriers. Predictor variables included: age of parent, gender of parent, number of children, race, low SES, if they were parenting with a partner (vs. alone or with another relative in the home), and age-group of children. From this, we

drew conclusions about changes in the odds of whether or not a participant was predicted to experience a barrier, by examining the predictor variables with significant p -values.

Research Question 2b: What factors predict the number of barriers?

To answer Question 2b, we ran a regression predicting the number of barriers a participant reported looking at the same variables related to demographics of participants as those used in Research Question 2a (age of parent, gender of parent, number of children, race, low SES, if they were parenting with a partner vs. alone or with another relative in the home, and age-group of children). The regression results show the statistical significance of each variable and the unstandardized coefficient of that value. Through these results, we can understand how the number of barriers each group experiences might be related to their response in each demographic category.

VI. RESULTS

Research Question 1a: What types of barriers are reported in response to a series of multiple-choice options?

Table A Survey question regarding barriers (multiple-choice responses)

Barrier	Frequency	Percent
Time	1,487	56.02%
Can't find out when and where classes are available	680	25.62%
Can't find a class that meets my/my family's needs	555	20.92%
Not sure what the classes cover	464	17.47%
Transportation	340	12.82%
Other _____	411	15.51%

These data show the most common barriers experienced by the 40.34% of the population who experienced at least one barrier ($n = 2,655$). It does not include those 59.66% of the surveyed population who responded that they did not experience any barriers to accessing service.

Research Question 1b: What types of barriers are reported in participants' qualitative responses?

Table B Survey question regarding barriers (open-ended responses)

Barrier	Frequency	Percent
Childcare	147	5.53%
Not interested	58	2.18%
Other answers	61	2.29%
Work	46	1.73%
Already participating/have participated in past	42	1.58%
Cost	41	1.54%

Lack of awareness	39	1.46%
Time/schedule	35	1.31%
Disability/mental health	29	1.09%
No kids/grown kids	22	0.82%
Location	18	0.67%

[Percent indicates the percent of people who provided that free response answer compared to those who selected at least one barrier (n=2655)]

The most common open-ended response answer to the question “*If you are interested in parenting education opportunities, but have not participated, what are the reasons?*” were answers related to childcare or babysitting. More specific answers included the cost of childcare, trustworthiness of care, childcare in other languages or for larger number of children, the desire to have children with them, or concerns about the ability to check in on them.

Another common response to this question were various notes of disinterest. About 25 people responded with answers such as “not interested” or “don’t want to attend.” Others were more specific reasons such as already having raised multiple children successfully, not interesting in having “experts” tell them their parenting style is wrong or ineffective or not interested in a group environment. In addition to those who simply indicated they weren’t interested, some were more specific in saying they had already attended or were currently attending a class.

Scheduling was also a common barrier given as a free response. Although one of the multiple choice options was “time,” it is helpful to see how many people wrote in more specific factors such as work schedule ($n = 46$). Others indicated more generally that they are “too busy” or have other responsibilities to manage as well.

Research Question 1c: Did participants experience more than one barrier to access?

Table C Participants who indicated at least one barrier

Number of barriers	Frequency	Percent
No barriers	3,926	59.66%
≥1 barrier	2,655	40.34%
Total	6,581	100%

The purpose of the above calculation is to understand how many parents might be experiencing challenges to accessing OPEC services. The above table (Table C) shows a breakdown of the number of participants who did or did not indicate any barriers in question 8 of the parenting survey. This data indicates that 59.66% of participants ($n = 3,926$) did not share any reasons they have not participated in parenting education opportunities. Additionally, 40.34% of participants ($n = 2,655$) indicated that they experienced at least one barrier. This indicates that although a majority of people did not indicate that they experienced these barriers, a still significant portion of the surveyed population did indicate they experience at least one barrier.

Table D Number of indicated barriers

Number of barriers	Frequency	Percent
0	3,926	59.66%
1	1,352	20.54%
2	779	11.84%
3	352	5.35%
4	133	2.02%
5	36	0.55%
6	3	0.05%
Total	6,581	100.00%

As shown in the above table, 59.66% of respondents ($n = 3,926$) did not indicate any perceived barriers to accessing parenting education. A single barrier was indicated by 20.54% of

respondents ($n = 1,352$). Two barriers affected 11.84% of people ($n = 799$). A smaller number of people selected three and four barriers, with just 0.55% of people surveyed ($n = 36$) indicating five barriers and only 0.05% ($n = 3$) experiencing all six.

Research Question 2a: What factors predict the presence or absence of barriers?

First, we used a logistic regression to examine the odds for a group of participants experiencing any of the barriers (See Appendix). The logistic regression results were significant, Chi-squared $\chi^2(13) = 351.80, p = .001$. The first group which showed significant findings in this test was the age of the parent. The odds ratio was 1.01 indicating that each year a parents age increases, the odds of them having any barrier will increase by 1%.

Parents who identified as Hispanic parents in comparison to white parents also showed a significant odds ratio (*odds ratio*=1.960). Here the analysis indicates that the odds of having a barrier was 96% greater for Hispanic-identifying parents than their white counterparts. Additionally, one other racial demographic showed statistical significance. Native American parents had an odds ratio below 1.0 (*odds ratio*=0.660) showing they actually had a decreased odds of experiencing a barrier. In this case, 34% lower odds than white parents of reporting any barrier.

Parenting alone or with another relative in the house were both significant compared to parenting with a partner. Parenting alone resulted in a lowered odds of experiencing a barrier by 16% (*odds ratio*=0.839). Parenting with another relative in the house had the greatest increase in odds of any demographic. These parents have an 804% greater odds of experiencing a barrier, over eight times greater odds.

The final demographic of significance was those with children in early childhood (ages 0-6 years old). The odds ratio for this group indicated odds of a decrease of number of barriers experienced (*odds ratio*=0.752). This means that there is a 25% lower odds of reporting a barrier if you have a child 0-6 years old.

Research Question 2b: What factors predict the number of barriers?

This regression looks at variables that predict the number of barriers a participant has (See Appendix). The regression is significant $F(13, 6567) = 16.38, p < .001, R^2 = 0.03$. We tested to see if parent age, parent gender, the number of children a parent has, their race, income (low SES versus high SES), whether or not they were parenting with a partner or alone, and the age of children predicted the number of barriers they reported relating to seeking out parenting education.

Age statistically predicted the number of barriers a participant would experience although by a very small amount ($p = 0.026$). For every unit of change (every one-year increase in a parent's age), we would expect them to experience an increase of 0.004 barriers. For example, a parent who is 10 years older than another parent would likely have ($10 \times 0.004 = 0.04$) 0.04 more barriers than a younger parent. This is small in practical significance.

The data also showed statistical significance ($p\text{-value} = 0.000$) that Hispanic participants would have more experienced barriers than their white counterparts. However, like age, the increase is relatively small at 0.24, meaning that you are expected to experience 0.24 more barriers on average. This is also small in practical significance.

The variables parenting with a partner versus parenting alone versus with another relative in the house produced multiple significant data points. First, parenting alone was statistically significant ($p\text{-value} = 0.022$), in predicting barriers, although this variable predicts a lower number of barriers than those parenting with a partner. There is a -0.07 reduction in the number of barriers expected to be indicated by this group. This is quite small in practical significance.

Parenting with another relative in the house predicted the greatest increase in number of barriers ($p\text{-value} = 0.00$). With an unstandardized coefficient of 0.739, those who are parenting with another relative in the home have nearly a whole additional barrier (0.73 increase) when trying to reach parenting education. This has the most practical significance of all the groups.

The final group with a significant p-value ($p=0.005$) was those who have children in early childhood (ages 0-6 years). This also showed that this factor would decrease the number of barriers experienced by this group. However, it was also very small practical significance at only -0.10 unit change.

VII. DISCUSSION/CONCLUSIONS

A. DISCUSSION

This study examined the reported barriers by parents that might prevent them from accessing parenting education services. We looked at the data for the multiple-choice answers as well as the participants' open-ended response answers. We also conducted regression analyses (logistic regression with dichotomous outcome and multiple regression with a continuous outcome) to further understand how these responses were predicted by the various demographic data we know about the participants.

Barriers to parenting education.

The majority of parents experienced a low number of barriers. Most did not indicate any barriers to participation (59.66% of total population surveyed), and an additional 32.38% experienced two or fewer barriers. This is good news when thinking about the real life significance of our study. Although even one barrier can be enough to prevent a family from being able to attend, we hope a reduction in any number of barriers could make a difference for these families.

The number of barriers an individual participant experiences also helps us to understand the larger scope of challenges parents and families might be facing when trying to participate. If a large number of families are experiencing the compounding effect of multiple barriers, simple changes to scheduling or information might not be enough to allow them to access parenting education.

Overall, the most common barrier reported in this study was "time." More than half of the participants who experienced a barrier (56.01%) reported time as a barrier they experienced. Additionally, people recorded other answers such as "work schedule" (1.73%) or "schedule" (1.31%) in their open-ended responses, which also relate to time. This is not a surprising result.

Research suggests that many families are busy and all have unique schedules and needs.¹ This also makes sense in the context of the research around the most effective parenting education programs. Research shows that evidence-based programs tend to be longer in duration (e.g., 10-14 weeks) and are those that are most likely to lead to lasting effects we hope we result from these classes.⁸ For families who have limited time, committing to an extended class, while very valuable, can be understandably difficult. It also relates to another barrier that was repeated in the free response section frequently, work. Many parents responded that specifically the irregularity of their schedule made them unable to attend.

The most common response in the “other” section was “childcare,” by far with 147 participants writing this answer in as a barrier they experience. Unfortunately, this was not included as one of the multiple-choice options. This might have influenced how many people indicated this was something they experienced. There might have been parents who would have checked “childcare” if it were an option provided to prompt their memory or for simplicity when filling out the survey. As OPEC has grown and expanded, one of the ways OPEC Hubs are already trying to combat this barrier is by providing free childcare during most classes. Although for some families, they might not be aware of this free service or it might not meet their needs (if they have children with disabilities, for example), hopefully with continuing to expand this service, more people will be able to attend.

Approximately a quarter of participants who experienced a barrier, indicated “can’t find out when and where classes are available.” An additional 1.46% wrote in answers in other that included “didn’t know they were available,” “not aware of classes” or “haven’t looked.” It is understandable that many people simply wouldn’t know about this resource. Parents have to balance many different responsibilities, and an increasingly large amount of information online.

An additional 20.92% of people said that they “can’t find a class that meets my/my family’s needs.” This question is challenging because it is somewhat vague in terms of providing us information to help reduce this barrier. Some parents provided more specific answers in the “other” response which included having children who are older, not having the class in the language their spouse speaks or parents who don’t feel comfortable in a classroom setting. This

question could also be interpreted in terms of scheduling if the family's need was to have weekend-only classes. For this reason, while it is helpful to understand that is a common experience, the data doesn't tell us a lot of information in terms of how we can make changes to correct these challenges.

Factors that predict barriers to parenting education.

One of the more interesting findings when we looked at factors predicting barriers through examining odds ratios was the greater odds of experiencing a barrier that parents who identify as Hispanic had compared to their white counterparts. In this study, the odds ratio for Hispanic-identifying parents was 1.96 meaning the odds nearly doubled that they would experience a barrier. But what does this mean practically? According to the data collected from this group of surveys about 30% of participants experienced at least one barrier. If we assume this is true for the general population, applying the double odds Hispanic parents face raised the expected chances of experiencing at least one barrier to approximately 60%. The fact that it is now more likely than not for this specific demographic to experience a barrier is one of the more practically significant findings.

It is also important to examine how classes may or may not be culturally relevant to the populations of parents OPEC is trying to reach. Some of the qualitative answers around language are good reminders that many pieces must come together for parents to be able to attend. Making sure that details such as the language of childcare offered during classes or cultural relevance of meals provided are all clearly communicated to parents as these can be barriers to attending. Additionally, factors such as location of classes must be considered. It is important that classes are held in spaces and buildings that all people feel comfortable being present in.

Parenting with another relative in the home was a demographic factor that came up multiple times as associated with an increased odds of experiencing barriers. While this could mean families in many different types of living situations, it can often refer to single parents who also have another relative such as a parent, grandparent, aunt or uncle living with them. While in some situations, this additional adult could serve as a support to the parent, it is important to note that they are often instead dependent on the parent for care as well. In this case, it is very

reasonable that parents may experience more challenges attending classes if they are a caregiver responsible for multiple generations.

In neither of the statistical analyses were gender of the parent, number of children, being African-American or Asian, or having children in middle childhood or adolescence significant factors in predicting the number of barriers participants in this study experienced.

B. LIMITATIONS

As with any surveyed population, the goal is to get the most representative sample possible. Although this population was relatively large and taken across multiple years and languages, we know there will always be challenges in creating a perfect sample. If there were families who are experiencing so many barriers that they are totally detached from the systems this survey was provided in, they likely did not participate, and we aren't able to include their experience in this analysis. It is possible that families who participated in this survey, because they were already connected in some way with parenting education organizations, were experiencing fewer barriers than the general population.

There were a large number of similar answers all provided in the "*other*" line. All together, if those common responses were to have been offered as a multiple-choice answer, it might have improved the consistency of the data as it would have been more standardized to code. It could have reached more people who did not write it down but would have indicated they also experienced that barrier if it were presented as an option. Examples of this include "childcare" which was one of the most common free response answers.

Another potential challenge or source of error in the data involves how the analysis of the responses included (or did not include) the free response data. For example, one of the multiple-choice answers provided was "time." Many people in the free response section indicated barriers such as "I am too busy" or "I don't have time to come with my work schedule." Arguably, these answers could fall under the barrier of "time" as they are both related to having enough available time to come to parenting classes. If we chose to include all time related answers, we would be able to see the greater (and potentially more accurate) number of people who experience time

related challenges. However, by choosing to look more closely at the specific answers people provided, we can gain a better understanding of the specifics of time related barriers that are most common the participants of the survey.

While reading the free response data for the barriers question, one of the most surprising answers was related to cost. In the free response section of this question, 41 participants wrote an answer related to cost or money. While some specified cost related to other factors such as transportation (“gas is too expensive”), many simply said “cost” or even specified cost of classes. OPEC does not typically charge for parenting classes and sometimes even offers free meals or childcare during classes for parents. This is an important reminder that perceived barriers are still barriers, whether or not they are accurate. If people think that the classes cost money and therefore are not attainable to them, they will not be able to participate. This could be true for other factors as well.

C. CONCLUSION

The results of this study were encouraging as we discovered that most people aren’t experiencing perceived barriers to parenting education. Of the approximately 40% of participants who did, we learned some valuable information about what kinds of barriers they experience and who is most at risk. Overall, most participants had similar experiences and similar odds of experiencing any given barrier. While there were a few factors such as identifying as Hispanic or parenting with another relative in the home which increased the odds, overall most parents had similar broad experiences.

This information will be helpful to those organizing parenting education services as it can help identify some groups who are at higher risk of experiencing barriers. In this case, those who identified as Hispanic, low socioeconomic status and who are parenting with another relative in the home have the greatest increase of odds. These findings are consistent with the research cited in the literature review which also found that factors such as cost and time are commonly reported barriers for families seeking other types of services.^{14, 15} Furthermore, we were able to

learn what specific factors are the most common obstacles, such as time and being able to find when and where classes are available.

One step moving forward for OPEC might include creating clearer and more easily accessible information for parents regarding classes. This information should include the location and time of classes as well as other basic information. This study found that many parents may not be able to attend due to childcare needs. This means, if childcare is offered at a class, it should be well communicated to parents to reduce that perceived barrier. Additionally, there were other perceived barriers, such as the cost of classes, that parents might have misinformation about. These would be important elements to have clear information about online. One way that OPEC might be able to reach more people is education through other services we know people utilize. This survey collected information about other services families use (e.g. WIC, Oregon Health Plan or Head Start). It is important that those who work for these resources are familiar with OPEC and can help direct families to this service with clear and accurate information.

If further surveys are conducted, some more specific questions might help us learn more about barriers people are experiencing. For example, asking parents to expand on “time” as a barrier can help us further understand if the length of classes, schedule of classes (time of day) or the busyness of their week makes it most challenging for them to attend. Additional studies could be conducted to pilot solutions for some of these common barriers such modifying scheduling of classes.

VIII. REFERENCES

1. Lurie-Hurvitz, E. (2009). Early experiences matter: Making the case for a comprehensive infant and toddler policy agenda. Zero to Three Policy Center.
2. Berk, L. E. & Meyers, A. B. (2012). *Infants and children: Prenatal through middle childhood*. Upper Saddle River, NJ: Prentice Hall.
3. Torres, A., Southwick, S. M., & Mayes, L. C. (2011). Childhood resilience: adaptation, mastery. *Resilience and mental health: Challenges across the lifespan*, 307.
4. Sektnan, M., Tominey, S., & Lewis, K. (November, 2017). The Oregon Parenting Education Collaborative: Impacts on Positive Parenting. Poster presented at the National Council on Family Relations Annual Conference, Orlando, FL.
5. Tominey, S., Sektnan, M., Lewis, K., Godlewski, B., & Daniels, E. (2017, December). Oregon Parenting Education Collaborative: Year 7 report, 2016-2017. Corvallis, Oregon: Oregon State University, College of Public Health and Human Sciences, Hallie E. Ford Center for Healthy Children & Families.
6. National Academies of Sciences, Engineering, and Medicine. (2016). *Parenting matters: Supporting parents of children ages 0-8*. National Academies Press.
7. Nowak, C., & Heinrichs, N. (2008). A comprehensive meta-analysis of Triple P Positive Parenting Program using hierarchical linear modeling: Effectiveness and moderating variables. *Clinical child and family psychology review*, 11(3), 114.
8. Lundahl, B. W., Nimer, J., & Parsons, B. (2006). Preventing child abuse: A metaanalysis of parent training programs. *Research on Social Work Practice*, 16(3), 251-262.
9. Grindal, T., Bowne, J. B., Yoshikawa, H., Schindler, H. S., Duncan, G. J., Magnuson, K., & Shonkoff, J. P. (2016). The added impact of parenting education in early childhood education programs: A meta-analysis. *Children and Youth Services Review*, 70, 238-249.
10. Finders, J. K., Díaz, G., Geldhof, G. J., Sektnan, M., & Rennekamp, D. (2016). The impact of parenting education on parent and child behaviors: Moderators by income and ethnicity. *Children and youth services review*, 71, 199-209.
11. Brooks-Gunn, J., & Markman, L. B. (2005). The contribution of parenting to ethnic and racial gaps in school readiness. *The future of children*, 139-168.

12. E. Pinderhughes, K. Dodge, J. Bates, G.Pettit, A. Zelli, "Discipline responses: Influences of parents' socioeconomic status, ethnicity, beliefs about parenting, stress, and cognitive-emotional processes, "Journal of Family Psychology 14 (2000), 380-400.
13. Kalil, A. (2016). How economic inequality affects children's outcomes. Delivering equitable growth, 25.
14. Girio-Herrera, Erin, Owens, JulieSarno, Langberg, JoshuaM.3 (2013) Perceived Barriers to Help-Seeking Among Parents of At-Risk Kindergarteners in Rural Communities. 42(1), 68-77
15. Pullmann, M.D., VanHooser, S., Hoffman, C. et al. Community Ment Health J (2010) 46: 211.

IX. APPENDIX

Table F Logistic Regression

n = 6,581
 $\chi^2(13) = 351.80$
 Prob > $\chi^2 = 0.000$

Variable	Odds Ratio	Stand. Error	z	P> z
Age of parent	1.013	.0037	3.66	0.000
Female ^a	1.001	.0773	0.01	0.990
Number of children	1.033	.0264	1.25	0.211
African-American ^b	1.096	.2591	0.39	0.697
Hispanic ^b	1.960	.1303	10.13	0.000
Asian/Pacific Islander ^b	1.279	.2260	1.39	0.164
Native American ^b	0.660	.0985	-2.78	0.005
Low-SES ^c	1.435	.0849	6.11	0.000
Parenting alone (no partner) ^d	.8399	.0562	-2.60	0.009
Parenting with other relative ^d	8.040	1.933	8.67	0.000
Child (ages 0-6)	.7519	.0579	-3.70	0.000
Child (ages 7-12)	1.046	.0620	0.77	0.440
Child (ages 13-18)	1.000	.0748	0.01	0.992
Constant (baseline odds)	.3398	.0616	-5.94	0.000

[^a versus male parents; ^b versus white parents; ^c versus mid- or high-SES parents; ^d versus parenting with a partner]

Table G Regression

n = 6,581
 F(13, 6567) = 16.38
 Prob > F = 0.0000
 R2 = 0.0314
 Adjusted R2 = 0.0295

Variable	B-value	Stand. Error	t	P > t
Age of parent	.0041	.0019	2.23	0.026
Female ^a	.0033	.0386	0.09	0.932
Number of children	.0121	.0129	0.094	0.350
African-American ^b	-.0269	.1175	-0.23	0.818
Hispanic ^b	.2432	.0339	7.16	0.000
Asian/Pacific Islander ^b	.1553	.0891	1.74	0.081
Native American ^b	-.1130	.0704	-1.61	0.108
Low-SES ^c	.1751	.0293	5.96	0.000
Parenting alone (n partner) ^d	-.0766	.0333	-2.30	0.022
Parenting with other relative ^d	.7389	.0897	8.24	0.000
Child (ages 0-6)	-.1087	.0389	-2.79	0.005
Child (ages 7-12)	-.0043	.0297	-0.15	0.884
Child (ages 13-18)	-.0150	.0377	-0.40	0.691
Constant (baseline)	.4833	.0905	5.34	0.000

[^a versus male parents; ^b versus white parents; ^c versus mid- or high-SES parents; ^d versus parenting with a partner]

