



Comparing Teacher and Parent Evaluations of a Backpack Program to Reduce Food Insecurity

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Introduction

The purpose of this study was to evaluate the parent and teacher perceptions of the Food for Kids BackPack program in Long Beach, CA.

The BackPack program provides meals for children over the weekend by sending home food in children’s backpacks.

There is limited research on nutritional impacts of backpack programs; further research is needed to assess impacts and inform future work.

Hypotheses

H₀1: There will be no significant difference in perceived impacts of the backpack program between teachers and parents on the children’s academic outcomes.

H₀2: There will be no significant difference in perceived impacts of the backpack program between teachers and parents on the recipients’ health outcomes.

H₀3: There will be no significant difference in perceived impacts of the backpack program between teachers

Methods

To begin, two surveys were created, one for parents and one for teachers, that assessed parent and teacher perceptions of the BackPack program’s impact on child’s energy level, diet, nutrition knowledge, concentration level, and academic performance. Surveys also assessed factors related to participation, such as perceived difficulty of participating and whether respondents would recommend the program to others. In addition, the survey assessed how long the food would last, and how many people in the household benefitted from the provided food.

The surveys were distributed through the Backpacks and the parents and teachers were given two weeks to complete and return them.

A Cronbach’s alpha test was run to measure the internal reliability of the survey constructs. Descriptive data were used to characterize perceptions of the program.

Table 1. Abbreviations for parent survey questions	
Questions	Shortened Names
The Backpack program has enhanced my child's energy level.	Energy
The Backpack program has improved my child's diet.	Diet
The Backpack program has improved what my child knows about nutrition.	Nutrition
The Backpack program has enhanced my child's concentration.	Concentration
The Backpack program has improved my child's academic performance.	Performance
The Backpack program helps my family stretch our food budget.	Budget
The Backpack program is easy to participate in.	Participate
My child enjoys the program.	Enjoy
I would recommend this program to other families.	Recommend
How long does the food received in one backpack usually last?	Length
Which people in your household benefit from the Backpack program	Household

Table 2. Cronbach's Alpha	
2018 and 2019 Student Surveys n= 100	
Performance	.999
Child Outcomes	.999
Overall	.998
2019 Teacher Surveys n=6	
Performance	.783
Child Outcomes	.973
Overall	.932
Student and Teacher Surveys Combined n=6	
Performance	.573
Child Outcomes	.559
Overall	.720

Table 1. Abbreviations of the survey questions

Table 2. Results of the Cronbach's alpha test

Table 3. 2018 and 2019 Student Surveys					
	Strongly Disagree	Disagree	Not Sure	Agree	Strongly Agree
	n(%)				
Energy N=96	1(1)	2(2)	7(7)	32(33)	54(56)
Diet N=97	0(0)	4(4)	9(9)	36(37)	48(49)
Nutrition N=95	0(0)	2(2)	7(7)	37(39)	49(50)
Concentration N=95	1(1)	1(1)	14(15)	34(36)	45(47)
Performance N=96	1(1)	1(1)	15(16)	30(31)	49(51)
Budget N=97	0(0)	2(2)	3(3)	22(23)	70(72)
Participation N=96	1(1)	0(0)	5(5)	24(25)	66(69)
Enjoyment N=97	1(1)	0(0)	3(3)	21(22)	72(72)
Recommend N=97	0(0)	0(0)	4(4)	20(21)	73(75)
	One Meal	2-4 Meals	All weekend, but not into the following week	All weekend and into the following week	
Length N=86	9(10)	41(48)	22(26)	14(16)	
	Only the child who received the backpack	The child who received the backpack and other children living in the household	The child who received the backpack and other living adults in the household	The child who received the backpack, other children living in the household, and other adults living in the household	
Household N=87	9(10)	31(36)	22(26)	24(28)	
What foods would you or your child like to receive that you are not currently receiving in the backpacks?					
Food			Word Count		
Vegetables			19		
Snacks			18		
Fruits			16		
Milk			11		
Bread			8		
Which foods in the backpacks are you or your child's favorite foods?					

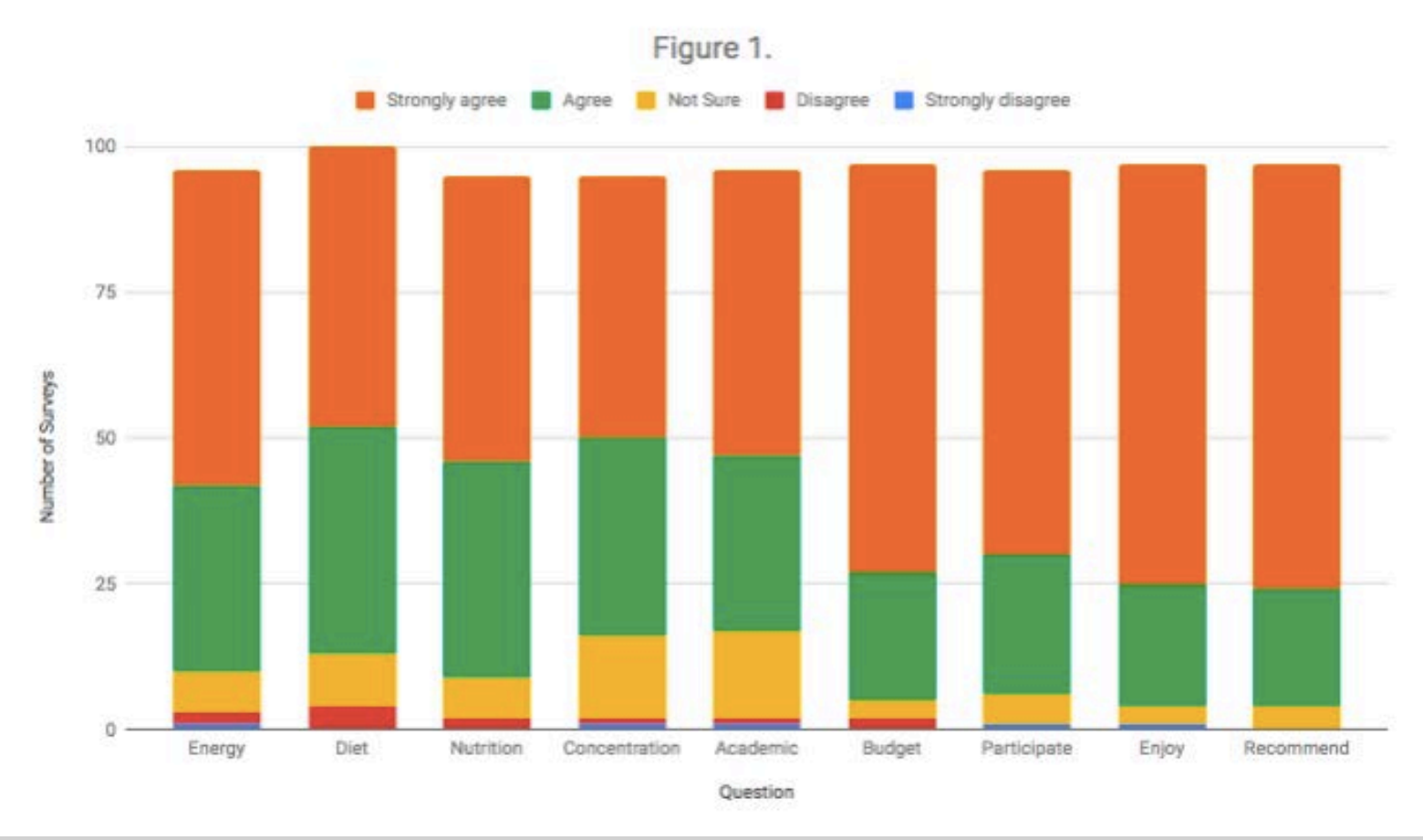


Figure 1. Parent responses to 2018 and 2019 student surveys questions 1-9

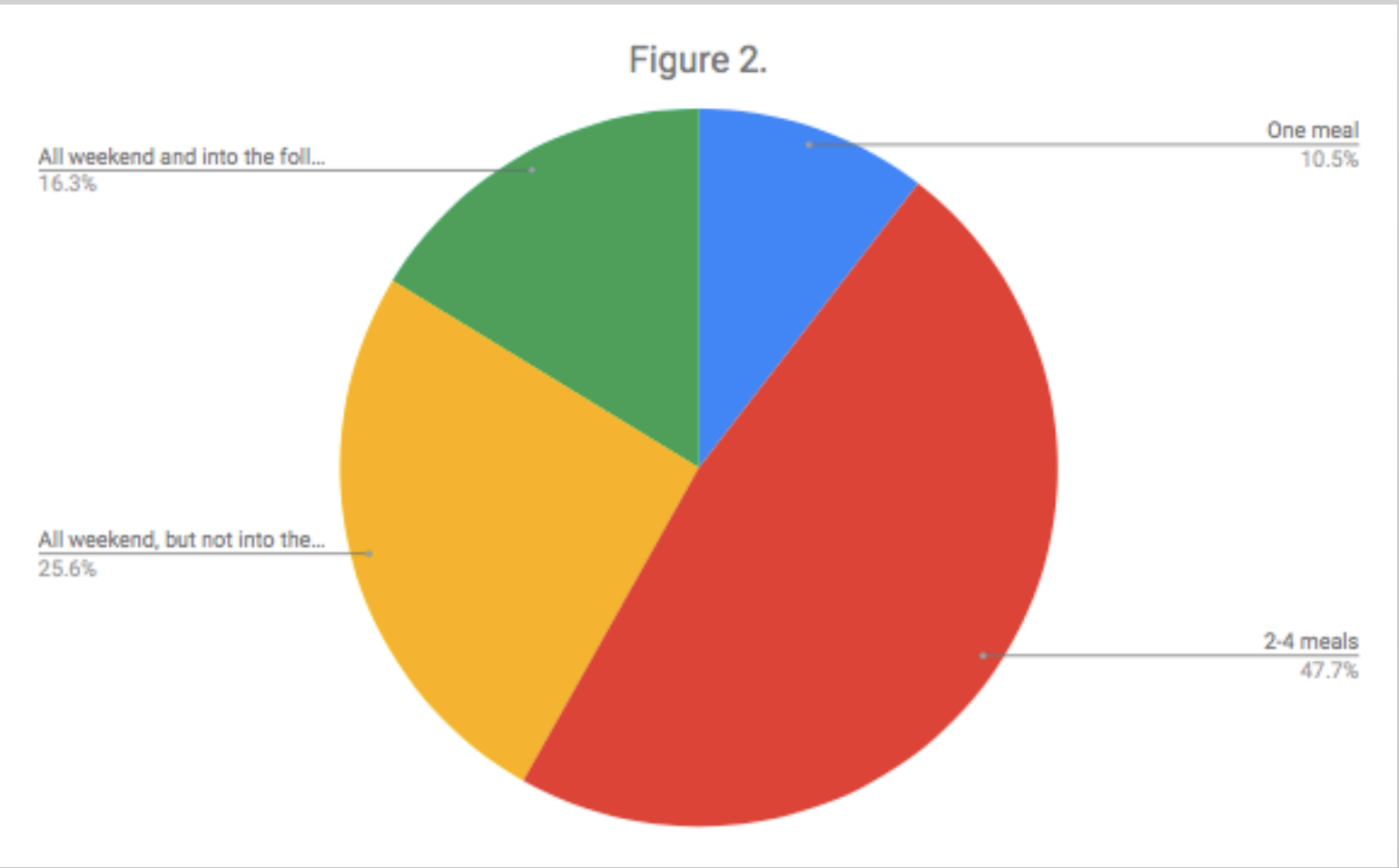


Figure 2. Parent responses to how long the food in the backpacks lasts

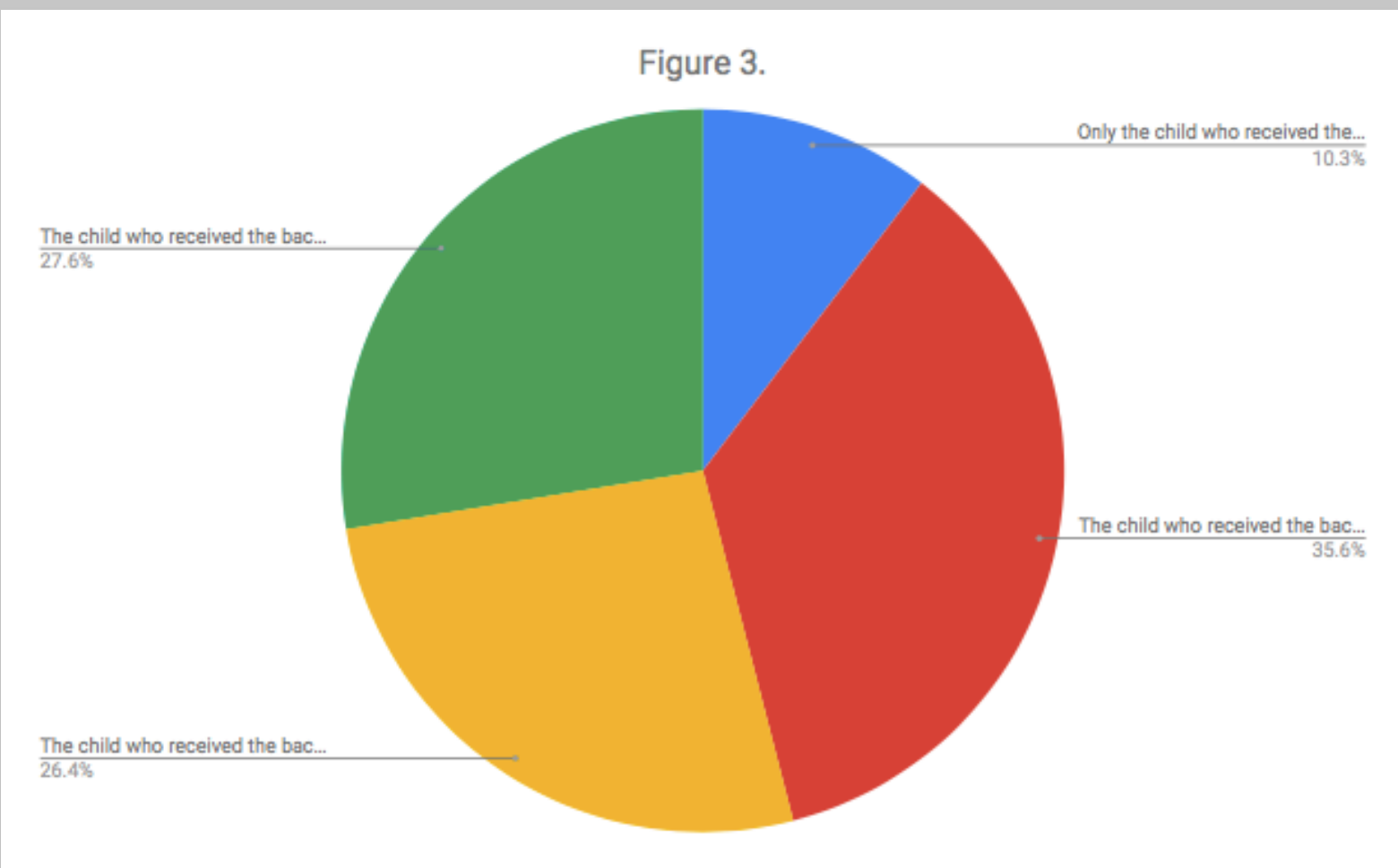


Figure 3. Parent responses to how many people in the household benefit from the food in the backpacks

Results

In total, 98 student and 6 teacher surveys were collected. For this survey, 15 schools in Long Beach, CA were surveyed. Of the 15, 7 schools responded.

Of the schools that responded, all were predominantly Hispanic with every school having a student population of at least 59% Hispanic and ranging from 48-50% female and 50-51% male (Stevenson, 2019; Herrera, n.d., Oropeza, n.d.; Willard, 2019; Burbank, 2019; Grant, n.d; Webster, 2019). The schools also contained 85-93% low-income students and 83-88.2% of students who receive free or discounted lunch (“Stevenson”, 2019; Herrera, n.d., Oropeza, n.d.; Willard, 2019; Burbank, 2019; Grant, n.d; Webster, 2019).

Insufficient response by teachers precluded evaluation of the three hypotheses. Descriptive findings are reported below.

Table 4. 2019 Teacher Surveys						
	Strongly Disagree	Disagree	Not Sure	Agree	Strongly Agree	
Energy	0(0)	0(0)	2(33)	2(33)	2(33)	
Diet	0(0)	0(0)	1(17)	3(50)	2(33)	
Nutrition	0(0)	0(0)	2(33)	2(33)	2(33)	
Concentration	0(0)	0(0)	1(17)	3(50)	2(33)	
Absent	0(0)	1(17)	2(33)	1(17)	2(33)	
Performance	0(0)	0(0)	2(33)	2(33)	2(33)	
Enjoy	0(0)	0(0)	0(0)	2(33)	4(66)	
Recommend	0(0)	0(0)	0(0)	1(17)	5(83)	
Students who Participate	None	1-5	6-10	11-15	16-20	More than 20
	0(0)	1(17)	1(17)	0(0)	2(33)	2(33)
Drop out	3(50)	1(17)	1(17)	1(17)	0(0)	0(0)

Table 4. Teacher Responses to 2019 Teacher Surveys

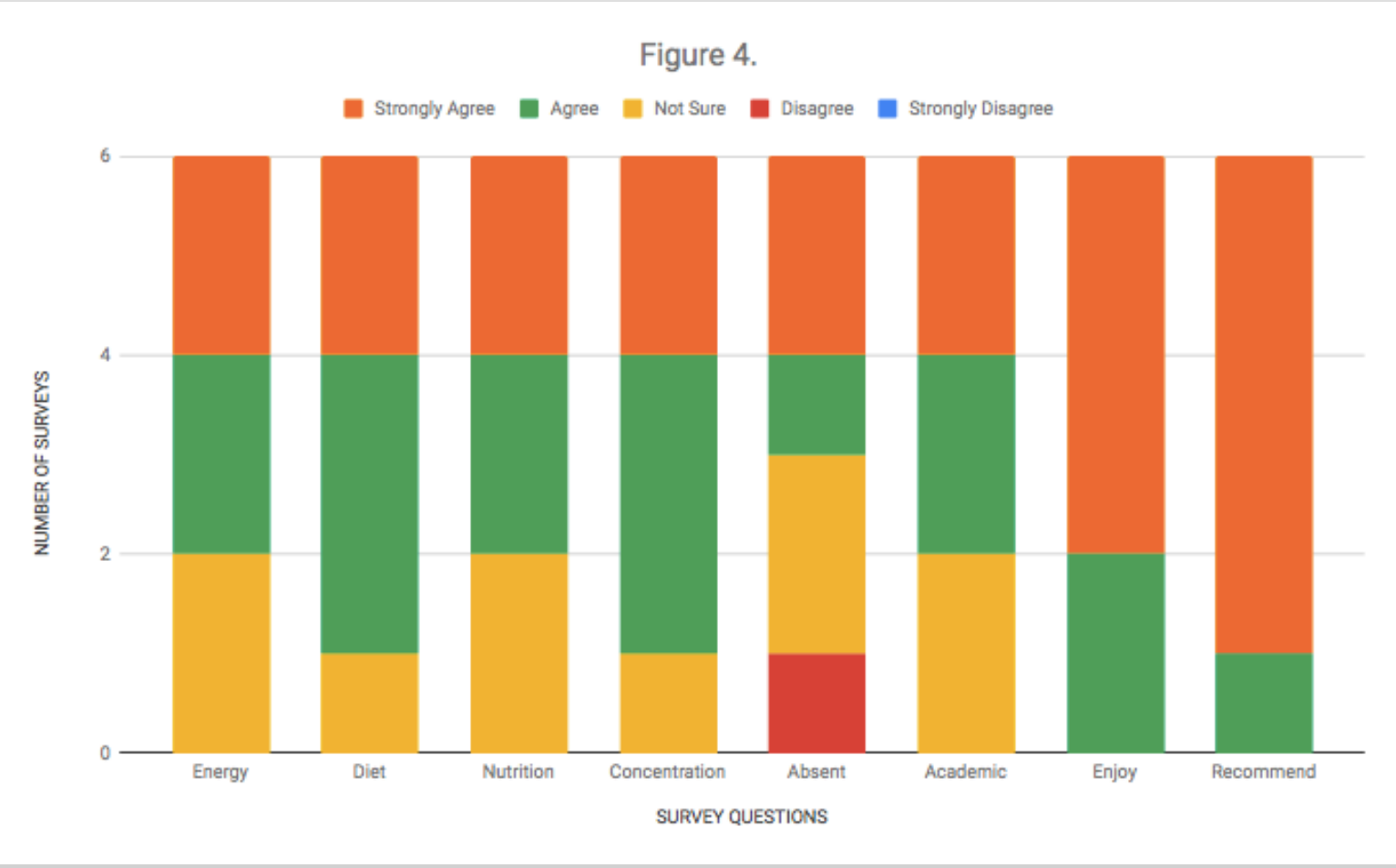


Figure 4. Teacher Responses to 2019 Teacher Surveys for questions 1-8

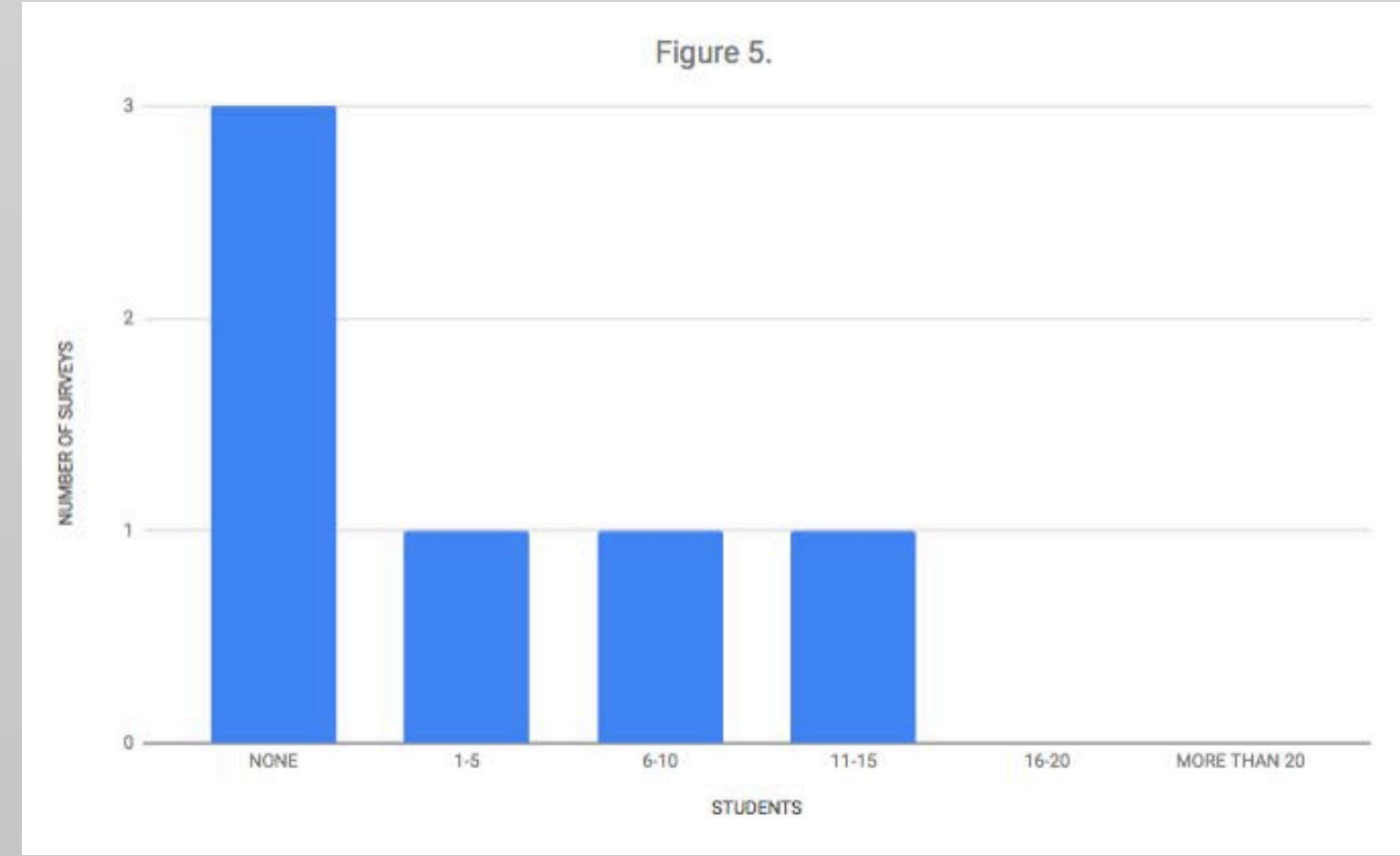


Figure 5. Teacher responses to the number of students who participate in the backpack program in their class

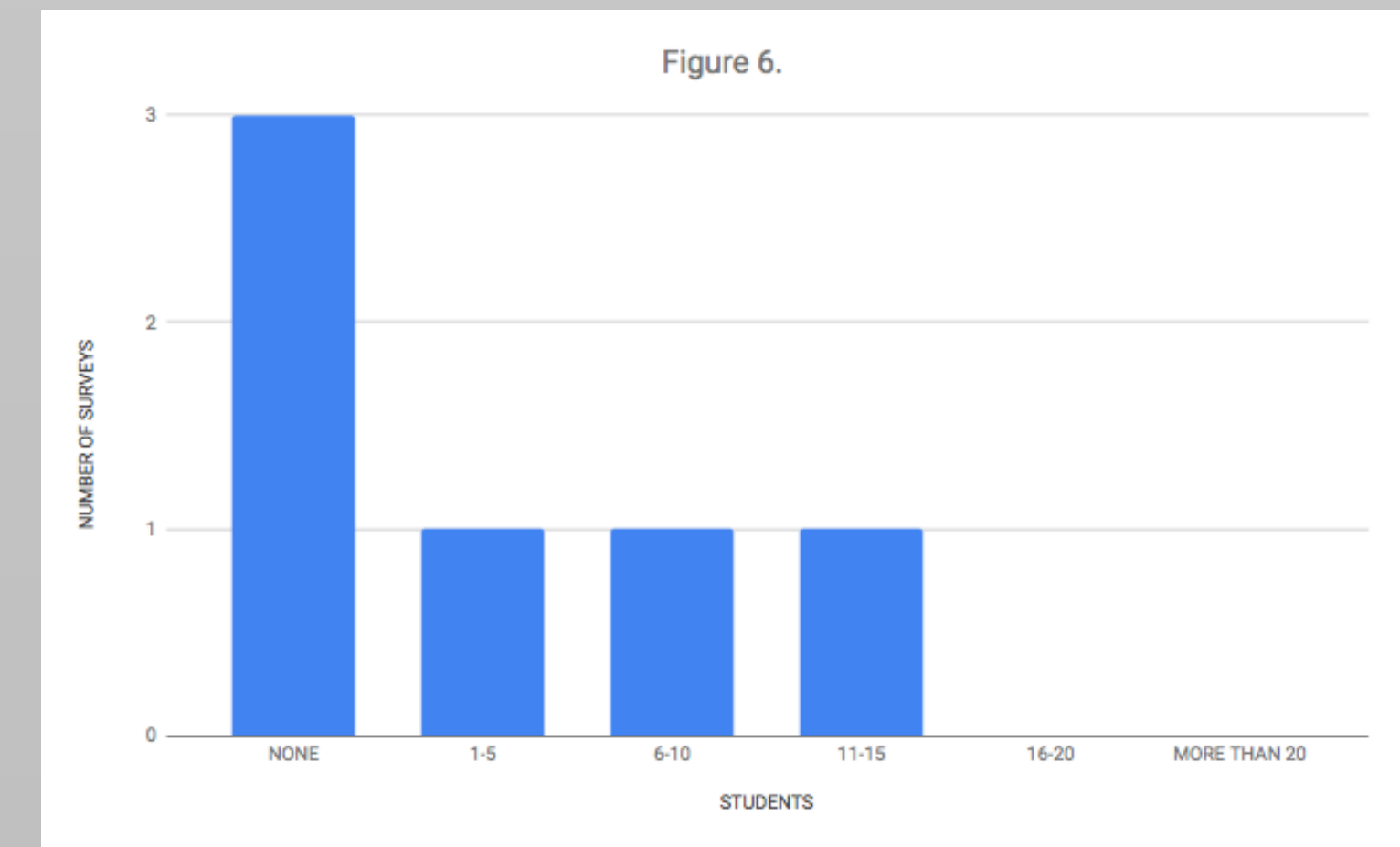


Figure 6. Teacher responses to how many children in their classes have dropped out of the backpack program

Discussion

The results from this study are consistent with a previous study performed at the Food Bank of Delaware (Cotugna & Forbes, 2007).

The Food Bank of Delaware program found that the majority of the parents felt participation in the program was not difficult and all would recommend the program to someone else (Cotugna and Forbes, 2007). This is consistent with the results of the current survey in which 94% and 96% of parents felt participation in the program was easy and would recommend the program to someone else.

Another study conducted by Hanson and Connor concluded that the backpacks were often used to feed the children lunch on the weekends (Hanson & Connor, 2017). The results from this survey are consistent with these in that 41.9% of parents reported the food in the backpacks lasted through the weekend.

Not all results found in the current study are consistent with existing literature. One study found that 50% of respondents perceived that their child’s academic performance improved and 38% found that their concentration improved (Ecker and Sifers, 2013). The results from this study were remarkably higher in that 83% of parents believed their child’s concentration to improve and 82% felt that their child’s academic performance had improved.

Conclusion

The study found that the majority of parents and teachers have a positive perception of the Food Finders BackPack program and would recommend it to someone else.

The BackPack program has a perceived effect of reducing food insecurity and improved diet quality.

Written feedback from program participants indicated areas for improvement, including provision of fresh fruits and vegetables, milk, and bread and reducing the amount of beans and other canned items given.

Further research needs to be performed to accurately capture the effects of the Backpack program on students and teachers.

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For more information

Please contact lauren.cook1@csulb.edu. More information on this and related projects can be obtained at www.csulb.edu.

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