The Significance of Parental Involvements in Reducing K-12 Students Absenteeism

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Abstract: Absenteeism is of great concern for K–12 school students in the United States. The aim of this study is to evaluate effects of parental participation types in absenteeism of Elementary and Secondary Education (K-12) students in the United States. We analyze the data of the U.S. Department of Education (Hanson et al., 2019), in relation to students, schools and parents' characteristics, along with various parental involvement activities, for exploring how these factors influence K-12 students' absenteeism in the United States. We employ Chi-square tests for the significance of relationships between parental involvement types and absenteeism of K-12 students. We also undertake multiple logistic regression analyses to evaluate the significance and odds of K-12 students' absenteeism due to parental involvement activities and other underlying factors. The results of bivariate analyses suggest that parental involvement types are significantly associated with K-12 absenteeism (chi-squared p-value<0.05). Multiple logistic regression analysis reveals that only a subset of underlying parental activities is significantly related to higher odds of absenteeism as measured by estimates of odds ratios (OR) and 95% confidence interval estimates. It also suggests that parental education, ethnicity and poverty adjusted for other factors also significantly affect absenteeism.

Keywords: *Absenteeism, confidence interval, K-12 students, odds of absenteeism, parental participation.*

Introduction

Being present in school is one of the most fundamental conditions for students' academic successes. In simple terms, an absence of this fundamental condition may be referred to absenteeism. Various aspects and forms of definitions of absenteeism appear in available literature and researches (Bauer et al., 2018; Chang et al., 2018; Henderson et al., 2014; Rasasingham, 2015; Reid, 2005; Teasley, 2004). Truancy, problematic absenteeism and chronic absenteeism are often interchangeably considered as absenteeism. There are opinions opposing such a generalization that may make it difficult to understand absenteeism (Kronholz, 2011; Reid, 2005). Absenteeism has a negative and significant relationship with students' academic achievement outcomes (Gershenson, et al., 2017; Gottfried, 2010, 2011; Gottfried & Kirksey, 2017). And yet, the absenteeism exists in K-12 education in the United States (Balfanz & Byrnes, 2012; Chang et al., 2018; Kearney, 2007; McCray, 2006; U.S. Department of Education, 2019).

Absenteeism is a serious problem in K-12 learning in the United States (Baltimore Education Research Consortium, 2011; Chang et al., 2014; Gottfried & Kirksey, 2017; U.S. Department of Education, 2019). Due to the severity of this problem, it has been called a public health issue and a hidden educational crisis (Bruner et al., 2011; U.S. Department of Education, 2019).

Many researches focused in distinguishing various forms and reasons of absenteeism (e.g., Kearney, 2007, 2008; Kearney et al., 2020; Reid, 2005, 2008), while others focused on how absenteeism could be reduced (Allen et al., 2018; Curry-Stevens et al., 2016; Robinson et al., 2018; Rogers & Feller, 2018). The reason for shifting attention towards absenteeism reduction is simply because it has become an undeniable crisis in the United States. There is indication that parental perceptions (Robinson et al., 2018) or parental involvement (McCray, 2006) may contribute in absenteeism induction. However, contribution of parental involvement activities or the extent to which parental activities may contribute in relation to K-12 absenteeism is not well documented. This study aims at investing various

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parental involvement factors in relation to the absenteeism episodes by analyzing the data from the National Household Education Survey (NHES) 2019.

Review of Literature

There has been a lack of consistency in the definition of absenteeism (Henderson et al., 2014; Reid, 2005; Teasley, 2004). Various forms of absenteeism, namely, chronic absenteeism, truancy and problematic absenteeism are often assumed and discussed in a number of articles in the literature (Bauer et al., 2018; Chang et al., 2018; Henderson et al., 2014; Rasasingham, 2015; Reid, 2005). Students missing school for 18 days or more in a given academic year due to any excused or unexcused reason is referred to as a chronic absenteeism (Jacob & Lovett, 2017). Truancy refers to absenteeism of student subject to compulsory attendance policy remaining absent for invalid causes with parents being unaware (Ginsburg, et al., 2014; Kearney, 2008; Reid, 2005). The problematic absenteeism relates to absenteeism in youth (Kearney, 2008; Kearney et al., 2020). Other sub-types absenteeism has also been addressed in literature (e.g., Reid, 2005).

Absenteeism has been a national crisis in the United States. The undeniable problem or concern of absenteeism is not a new one, and indeed, it dates back in the late 19th century (Goldstein, 2015). And yet, the absenteeism exists and is a great problem. Allen et al. (2018) provides a detail discussion of factors of absenteeism, along with various assessments and interventions options for reducing absenteeism. By targeting K-5 students and parental beliefs, Robinson et al. (2018) evaluates whether parental beliefs could contribute in mobilizing students' attendance or reducing absenteeism at early grades. Bauer et al. (2018) provides a great review of student and school factors relating to absenteeism, and discusses evidence-based strategies towards reducing absenteeism. Jacob and Lovett (2017) note the problems of absenteeism in the United States along with possible factors that might be related to the absenteeism.

Many researches explore impact of absenteeism on students' academic performance, schools or societies (García & Weiss, 2018; Gershenson, et al., 2017; Gottfried, 2010, 2011, 2014) and they noted that there is a negative and significant relationship between absenteeism and academic achievement outcomes. Due to chronic absenteeism, third-graders fail to master reading, sixth-graders fail subjects and ninth-graders drop out of high school (Attendance Works, 2018; Neelakantan, 2019), and therefore, can devastate K-12 learning (Chang et al., 2014). High rates of absenteeism and of its consequences become apparent even in pre-kindergarten (Connolly & Olson, 2012; Ehrlich et al., 2014), and therefore, the problem is viewed as the absenteeism crisis (Harris et al., 2015). Curry-Stevens et al. (2016) noted the problem of absenteeism among students of colors and with disability.

Given facts of absenteeism and of consequences, it has become inevitable to search for factors that can contribute to the reduction of absenteeism. Rogers and Feller (2018) investigate if absenteeism could be reduced by correcting parents' misbeliefs of students' absences. Balfanz (2016) points out how K-12 students with achievement gap due to absenteeism can get back in track by attending schools regularly. Gysbers and Henderson (2006) suggested effective school counseling for the reduction of absenteeism or the improvement in attendance. However, none of the studies considers what parental activities might contribute to the absenteeism episodes in K-12 schools adequately. By all means and considerations, it is worth reviewing parental activities and how it fares in relation to the K-12 students' absenteeism. In this study, we undertake a thorough investigations of parental activity and other related factors for possible contribution in reducing absenteeism. This study is expected to be supplemental to the stakeholders in proposing a meaning intervention and of its implementation. This study does not make any distinction between absenteeism types so as to comply with the dataset in the underlying surveys we opt for analyzing.

Methodology

In this section, we provide an outline incorporating the aim of this study, research questions along with related hypotheses, sample and population and data analysis procedures.

Aim of the study

The aim of this study is to investigate how parental involvement factors fare in relation to the K-12 school students' absenteeism in the United States, along with other related factors, and if possible, quantify the extent of contribution of each factor in relation to the K-12 students' absenteeism. Specifically, we seek answers to the following research questions and formulated hypotheses:

Question 1: Are parental involvement types and other factors associated with K-12 students' absenteeism?

Null Hypothesis 1: Family involvement types and other related factors are not associated with K-12 students' absenteeism.

Alternative Hypothesis 1: Family involvement types and other related factors are indeed associated with K-12 students' absenteeism.

Question 2: How are odds of absenteeism of K-12 students related to the family involvement factors or other related factors?

Null Hypothesis 2: Odds of absenteeism of K-12 students are not related to the family involvement factors or other related factors.

Alternative Hypothesis 2: Odds of absenteeism of K-12 students are related to the family involvement factors or other related factors.

We seek answer to these questions by analyzing absenteeism status in relation to the parent and family involvement factors, along with other related factors.

Population

The population of this study consists of about 51.5 million students attending K-12 grades in the 50 States and the District of Columbia, United States due to Parent and Family Involvement (PFI) in Education Surveys (2019) and the National Household Education Surveys (NHES) Program (2019).

Sample

The initial sample consists of 16,446 students (or parents of those students) who completed the PFI in Education Surveys (2019), administered as a part of the NHES Program (2019). This sample also includes 456 students who attended home-school or other virtual platform (having no physical school structure). All fields regarding absenteeism and school characteristics are missing for these students. After exclusion due to missing cases for being in home-school and related criteria, the effective sample size for this study is 15,682 K-12 students.

Response variable

The response variable of interest in this study is K-12 grade students' absenteeism status, which exists in four categories: 0 to 5 days, 6 to 10 days, 11 to 20 days and more than 20 days, with respective percentages 81.5, 14.7, 2.9 and 0.9. We convert these four groups into two groups with values 1: 0 to 5 days (81.5%) and 2: more than 5 days (18.5%). With this conversion, there has been no difference in the overall conclusion in regarding the significance of the underlying predictors of this study, rather than having an interpretational simplicity.

Predictors and weight variable

For possible predictors of absenteeism, we investigate eight parental factors and five other factors, which are listed in Table 1.

Table 1. Descriptions (abbreviation, values and meaning) of various in the study

Factors	Abbreviation	Values	Meaning
Parents education	Peduc	1	Less than HS
		2	HS or equivalent
		3	Vocational /Technical
		4	College graduates
		5	Graduate or professional
Ethnicity	Ethnicity	1	NH-White (White)
		2	NH-Black (Black)
		3	Hispanic (H)
		4	Asian/PI
		5	Others
Poverty	Poverty	1	Poor
		2	Nonpoor
Gender	Gender	1	Male
		2	Female
School type	SchType	1	Public
		2	Private
Attend school event	Ase	1	Yes
		2	No
Serve as a volunteer	Voln	1	Yes
		2	No
Attend school meeting	Asm	1	Yes
		2	No

Table 1. Continued

Factors	Abbreviation	Values	Meaning
Attend parent teacher meeting	Aptm	1	Yes
		2	No
Attend parent teacher conference	Aptc	1	Yes
		2	No
Participate in fundraising	Fundr	1	Yes
		2	No
Serve on a school committee	Sosc	1	Yes
		2	No
Meet with guidance counselor	Mwgc	1	Yes
		2	No

As we note from Table 1, eight parental factors are attending a school event, serve as a volunteer, attend a school meeting, attend a parent-teacher organization meeting, attend parent-teacher conference, participate in fundraising, serve on school committee, meet with guidance counsellor. Other factors included are gender of the student, parental education, ethnicity, school type and poverty, defined using the algorithm (Hanson & Pugliese, 2020).

Analyses

We perform the following statistical analyses in this study:

(1) We start with a one-way descriptive analysis of various factors in this study which are considered as potential factors in relation to the K-12 students' absenteeism.
(2) Then, an attempt is being made to investigate which parent and family involvement factors and other factors are significantly associated with K-12 students' absenteeism via chi-squared test for each of two-way tables formed by a given factor and absenteeism status. Analyses involved in this step enable us answer Question 1 and of related hypotheses.
(3) Finally, we perform multiple logistic regression analysis for studying the relationship of absenteeism odds of K-12 students due to various underlying factors to answer Question 2 and related hypotheses. We consider three separate multiple logistic regression models—model 1 (M1) with only student, parent and school characteristics, model 2 (M2) with only parental involvement factors, and model 3 (M3) with all factors together to find the effect of one model (M1 or M2) adjusted for other (M2 or M1).

All specified analyses have been performed by employing statistical analysis system (SAS) survey procedures available from SAS Institute (2017).

Results

In Table 2, we report the initial profile (descriptive statistics) of the sample due to the underlying characteristics. Analyses presented in Table 2 show that the percent (%) and weighted percent (wgt %) distribution of each factor by values it takes are different. It is to be noted that the survey data is always equipped with survey weight, which compensates for different aspects of the sampling or of data collection processes due to stratification and non-uniformity of sample across different groups. The underlying survey data we analysed includes the final parent interview weight (FPWT), which has been utilized in all analyses by incorporating statistical analysis system (SAS) survey procedures such as Proc Surveyfreq, Proc Surveylogistic, etc. available from SAS Institute (2017). Survey weight is used to get corrected standard errors of any estimates for getting corresponding confidence interval estimates or test of hypotheses.

Table 2. Descriptive statistics of various factors (f, % and weighted %) in the sample

Factors	Values	f	%	wgt %
Gender	Male	8143	51.9	51.9
	Female	7539	48.1	48.1
Ethnicity	White	8737	55.7	48.4
	Black	1511	9.6	13.6
	Hispanic	3263	20.8	25.4
	Asian/PI	1108	7.1	6.1
	Others	1063	6.8	6.5
Poverty	Poor	1798	11.5	14.5
	Nonpoor	13884	88.5	85.5

Table 2. Continued

Factors	Values	f	%	wgt %
Peduc	Less than HS	762	4.9	10.2
	HS or equivalent	1820	11.6	18.7
	Vocational /Technical	4376	27.9	25.5
	College graduates	4410	28.1	26.6
	Graduate or professional	4314	27.5	19.1
SchType	Public	14027	89.4	90.3
	Private	1655	10.6	9.7
Ase	Yes	12471	79.5	79.2
	No	3211	20.5	20.8
Asm	Yes	13326	85	85.6
	No	2356	15	14.4
Sosc	Yes	6638	42.3	41.3
	No	9044	57.7	58.7
Aptm	Yes	7104	45.3	47.4
	No	8578	54.7	52.6
Aptc	Yes	11345	72.3	75.2
	No	4337	27.7	24.8
Sosc	Yes	1999	12.7	12.1
	No	13683	87.3	87.9
Mwgc	Yes	5605	35.7	32.8
	No	10077	64.3	67.2
Fundr	Yes	9120	58.2	56.5
	No	6562	41.8	43.5
Total		**15,682**	**100**	**100**

In Table 3 we present results of chi-square tests due to each factor for possible association with K-12 school students' absenteeism.

Table 3. Results of chi-squared test of association of various factors with absenteeism

		Absenteeism status					
		0 to 5 days		> 5 days			
Factors	Values	%	SE (%)	%	SE (%)	chisq	Sig.
Peduc	1	8	0.47	2.2	0.26		
	2	14.5	0.5	4.2	0.31		
	3	20.5	0.45	5	0.22		
	4	22.3	0.46	4.3	0.22		
	5	16.4	0.35	2.7	0.15	35.9	**<.0001**
Ethnicity	1	38.8	0.56	9.7	0.36		
	2	11.6	0.44	2	0.21		
	3	20.8	0.52	4.6	0.26		
	4	5.2	0.26	0.9	0.13		
	5	5.1	0.28	1.3	0.13	17.3	0.0017
Poverty	1	11	0.47	3.5	0.28		
	2	70.6	0.59	14.9	0.42	18.4	**<.0001**
Gender	1	42.4	0.6	9.5	0.37		
	2	39.1	0.59	9	0.35	0.2	0.6191
SchType	1	73.1	0.54	17.2	0.47		
	2	8.5	0.33	1.3	0.13	14	0.0002
Ase	1	65.7	0.59	13.5	0.42		
	2	15.8	0.46	4.9	0.28	30.1	**<.0001**
Vol	1	34.7	0.56	6.6	0.32		
	2	46.9	0.61	11.9	0.4	17.5	**<.0001**
Asm	1	70.6	0.56	15	0.44		
	2	10.9	0.37	3.5	0.24	21.2	**<.0001**
Aptm	1	39.5	0.6	7.9	0.35		
	2	42	0.59	10.6	0.38	13.6	**0.0002**

Table 3. Continued

Factors	Values	Absenteeism status				chisq	Sig.
		0 to 5 days		> 5 days			
		%	SE (%)	%	SE (%)		
Aptc	1	62.1	0.59	13.1	0.42		
	2	19.4	0.46	5.4	0.29	15	**0.0001**
Fundr	1	47.6	0.6	9	0.34		
	2	34	0.58	9.5	0.38	38.7	**<.0001**
Sosc	1	10.4	0.35	1.8	0.14		
	2	71.2	0.55	16.7	0.47	11.3	**0.0008**
Mwgc	1	25.5	0.5	7.3	0.31		
	2	56	0.6	11.2	0.41	31.5	**<.0001**

As we see in Table 3, all the underlying factors are statistically significant with K-12 students' absenteeism, except for the gender of the student.

In Tables 4-7, we provide results of multiple logistic regression analyses under models M1-M3 for assessing odds of absenteeism due to each factor adjusted for other factors in the model.

Table 4. Model 1(M1) results of absenteeism due to parent, student and school characteristics

Factors	Effect	Coeff.	tValue	Sig.	ORest	95% CI (OR)
Peduc	1 vs 5	0.471	2.950	**0.0032**	1.60	(1.17, 2.19)
	2 vs 5	0.498	4.440	**<0001**	1.65	(1.32, 2.05)
	3 vs 5	0.353	4.300	**<0001**	1.42	(1.21, 1.67)
	4 vs 5	0.141	1.720	0.0849	1.15	(0.98, 1.35)
Ethnicity	2 vs 1	-0.538	-4.360	**<0001**	0.58	(0.46, 0.74)
	3 vs 1	-0.314	-3.670	**0.0002**	0.73	(0.62, 0.86)
	4 vs 1	-0.380	-2.380	**0.0175**	0.68	(0.50, 0.94)
	5 vs 1	-0.058	-0.460	0.6487	0.94	(0.73, 1.21)
Gender	2 vs 1	0.038	0.580	0.5613	1.04	(0.91, 1.18)
Poverty	1 vs 2	0.356	3.370	**0.0007**	1.43	(1.16, 1.76)
SchType	1 vs 2	0.384	3.130	**0.0018**	1.47	(1.15, 1.87)

Table 5. Model 2 (M2) results of absenteeism due to parental involvement factors

Factors	Effect	Coeff.	tValue	Sig.	ORest	95% CI (OR)
Ase	2 vs 1	0.216	2.680	**0.0074**	1.24	(1.06, 1.45)
Voln	2 vs 1	0.055	0.680	0.4977	1.06	(0.90, 1.24)
Asm	2 vs 1	0.162	1.860	0.0635	1.18	(0.99, 1.40)
Aptm	2 vs 1	0.141	1.900	0.0578	1.15	(1.00, 1.33)
Aptc	2 vs 1	0.130	1.790	0.0737	1.14	(0.99, 1.31)
Fundr	2 vs 1	0.244	3.320	**0.0009**	1.28	(1.11, 1.47)
Sosc	2 vs 1	0.141	1.300	0.1944	1.15	(0.93, 1.43)
Mwgc	2 vs 1	-0.456	-6.790	**<0001**	0.63	(0.56, 0.72)

From results of Table 4, it is evident that parental education, ethnicity, poverty and school type are significantly affecting K-12 absenteeism since p-value (Sig.<0.05). The evidence of the significance is also evident from the 95% confidence interval of the OR by the fact that the confidence interval does not include 1 (any confidence interval containing 1 is statistical evidence of non-significant effect). Students with parent having lower educational levels (e.g., Less than HS, HS or Vocational /Technical) compared to those with parents having graduate or professional degree have higher odds of absenteeism. For example, odds of absenteeism of students with parents' educational level 1(=Less than HS) is 1.6 (OR=1.6, 95% CI: 1.17-2.19) times the odds of absenteeism of students with parents' education at graduate or professional level. It appears that students in all ethnic groups have lower odds of absenteeism (ORest<1) compared to students with White ethnicity. Significantly higher odds of absenteeism for poor students compared with non-poor students or public-school students compared to private school students are also evident.

As we look at the results of Table 5, we see that parental involvement factors such as attending school event (ase), participating in fundraising (fundr) or meeting with guidance counsellor (mwgc) are statistically significant in relation to the K-12 absenteeism. Students whose parents do not attend school events have higher odds of absenteeism (ORest=1.24, 95% CI: 1.06-1.45) compared to students whose parents attend school events. On the other hand,

students whose parents do not meet with guidance counselor have lower odds of absenteeism compared to students whose parents meet with guidance counselor. In other words, not meeting with guidance counselor appears to be a protective factor in relation to K-12 absenteeism. This might imply that parents visit guidance counselor as a consequence of their children's absenteeism. Other parental involvement factors such as serving as a volunteer (voln), attending in school meeting (asm), attending in parent-teacher meeting, attending in parent-teacher conference or serving on a school committee are not statistically significant in relation to the K-12 school students' absenteeism.

In comparison of fitness of the two models M1 and M2, on the basis of two different sets of predictors, it appears that M2 model provides a better fit to the absenteeism of K-12 school students. Given these facts, we consider a third model (M3) with all the predictors employed in models M1 and M2. The analyses results show that M3 provides the best fit to absenteeism of K-12 students.

In Table 6, we provide the fitness statistics in relation to three models (M1-M3) and in Table 7, we provide the summary of results of multiple logistic regression in relation to model 3 (M3).

Table 6. Comparison of model fit statistics of three underlying models M1-M3

Mode fit statistics	Intercept only (M1-M3)	Models with Intercept and Covariates		
		M1	M2	M3
AIC	47449304	46738555	46595859	46059769
SC	47449320	46738744	46596001	46060084
-2 Log L	47449302	46738531	46595841	46059729

In relation to the model fit (Table 6), the fit statistics AIC, SC and -2LogL are referred to as Akaike Information Criterion (AIC), Schwarz Criterion (SC) and negative two times the log-likelihood. Any model with smaller value of AIC, SC or -2LogL criteria refers to the best model. Therefore, as we see M2 is better than M1, and M3 is best of all three models in predicting the odds of absenteeism of K-12 students.

Table 7. Model 3(M3) results of absenteeism due to parent and student characters

Factors	Effect	Coeff.	tValue	Sig.	ORest	95% CI (OR)
Ase	2 vs 1	0.204	2.490	**0.0128**	1.23	(1.04, 1.44)
Voln	2 vs 1	0.015	0.180	0.8605	1.02	(0.86, 1.20)
Asm	2 vs 1	0.137	1.580	0.1150	1.15	(0.97, 1.36)
Aptm	2 vs 1	0.132	1.770	0.0773	1.14	(0.99, 1.32)
Aptc	2 vs 1	0.130	1.770	0.0760	1.14	(0.99, 1.31)
Fundr	2 vs 1	0.233	3.160	**0.0016**	1.26	(1.09, 1.46)
Sosc	2 vs 1	0.092	0.850	0.3979	1.10	(0.89, 1.36)
Mwgc	2 vs 1	-0.454	-6.660	**<.0001**	0.64	(0.56, 0.73)
Peduc	1 vs 5	0.333	2.110	**0.0346**	1.40	(1.02, 1.90)
	2 vs 5	0.381	3.200	**0.0014**	1.46	(1.16, 1.85)
	3 vs 5	0.290	3.500	**0.0005**	1.34	(1.14, 1.57)
	4 vs 5	0.124	1.500	0.1349	1.13	(0.96, 1.33)
Ethnicity	2 vs 1	-0.600	-4.740	**<.0001**	0.55	(0.43, 0.70)
	3 vs 1	-0.345	-4.080	**<.0001**	0.71	(0.60, 0.84)
	4 vs 1	-0.421	-2.710	**0.0067**	0.66	(0.48, 0.89)
	5 vs 1	-0.081	-0.630	0.5260	0.92	(0.72, 1.18)
Gender	2 vs 1	0.059	0.890	0.3710	1.06	(0.93, 1.21)
Poverty	1 vs 2	0.313	2.960	**0.0031**	1.37	(1.11, 1.68)
SchType	1 vs 2	0.238	1.870	0.0612	1.27	(0.99, 1.63)

It has also been noted from the results of Table 7 that the significance of factors in M1 and M2 are retained in M3 except for the factor school type. Without parental factors in the model (M1) school type factor was significant, with public school showing higher odds of K-12 students' absenteeism, but in model 3 (M3) school factor is insignificant as noted from the p-value (sig.)=0.0612 and 95% CI (OR): 0.99-1.63 (due to the inclusion of 1 in the interval).

Discussion

Given the extent of K-12 school students' absenteeism and consequences relating to absenteeism (Balfanz & Byrnes, 2012; Baltimore Education Research Consortium, 2011; Chang et al., 2014, 2018; Gottfried & Kirksey, 2017; Kearney, 2007; McCray, 2006; U.S. Department of Education, 2019), it is worth reviewing potential factors of absenteeism. The proper understanding of causes of absenteeism is important (Henry & Huizinga, 2007).

While the most of the previous studies address students, schools and parents' characteristics in relation to absenteeism, and of the consequences of absenteeism in students' life, none addresses how parental involvement activities fair in relation to the reduction of K-12 students' absenteeism. A number of studies address the importance of overall family involvement in relation to chronic absenteeism (Gubbels et al., 2019; Rasasingham, 2015; Shafer, 2017; Woullard-Wilder, 2020). For example, Rasasingham (2015) concludes that family connectedness and involvement in collaboration with different agencies are important in preventing school absenteeism. Low parent-school involvement is one of the significant factors in school absenteeism (Gubbels et al., 2019). Woullard-Wilder (2020) suggests that poor parent/teacher relationship is one of the significant factors in relation to chronic absenteeism at school. This study also notes that a collaborative effort with families, schools, and communities explaining the unfavorable outcomes of students' chronic absenteeism might help to increase consistent attendance. Shafer (2017) suggests that targeting parental beliefs about attendance can get more kids to school, more often. To date, however, no single study seems to address the contribution of various forms of parental activities in relation to K-12 school students' absenteeism.

An adequate knowledge or any supplemental information would contribute positively in proposing meaningful intervention and of its implementation. To help better understand the absenteeism episode in K-12 students in the United States, we analyze nationally representative sample surveys 2019 covering students from 50 States and the District of Columbia. We review a number of parental involvement factors, and other related factors so as to evaluate how these factors affect the absenteeism odds of K-12 students.

Our results suggest that parental education, ethnicity and poverty are important factors for K-12 students' absenteeism—supporting the findings of prior research (Allison et al., 2019; García & Weiss, 2018; Lim, et al., 2019; U.S. Department of Education, 2019). Regarding parental involvements, it is noted that certain parental involvement factors are statistically significant in relation to the K-12 students' absenteeism—supporting the significance of the overall family involvement in prior research in relation to absenteeism (Gubbels et al., 2019; Rasasingham, 2015; Shafer, 2017; Woullard-Wilder, 2020). In particular, in contrast to other studies, this study suggests that certain nonparental involvement provides higher odds of absenteeism in K-12 students in the United States. To be specific, K-12 students whose parents do not attend school event (Ase) or do not participate in fundraising (Fundr) have higher odds of absenteeism compared to students whose parents do participate in such activities. On the other hand, this study also provides statistically significant evidence that nonattendance in meeting with guidance counsellor (Mwgc) is a protective factor in relation to absenteeism, which could be due to the fact that parents of students with problems only meet with guidance counsellor—and yet they have higher absenteeism, which makes sense intuitively.

Conclusion

Absenteeism in K-12 school students is a national problem in the United States because it is a driving force for adverse students' achievement outcomes. Understanding the factors predicting the absenteeism is of great interest to educators and policy makers to help develop better intervention strategies and implementation. Most of the previous researches focused on type of absenteeism and consequences of absenteeism in students' life, schools or societies. Parents perceptions of absenteeism have also been addressed before. This study using the NHES and PFI surveys, explores factors affecting K-12 students' absenteeism. Findings of this study will serve a basis in deciding intervention programs or incentives towards the reduction of the absenteeism by incorporating significant parental involvement factors. We believe that increased school-engagement and substantial parental participations should be emphasized while doing intervention strategies targeting the reduction of K-12 students' absenteeism.

Recommendation

This study recommends schools to work with parents as partners by involving them in various activities in relation to school and education for reducing K-12 students' absenteeism. Parental involvement in education could be an important component in intervention strategy and implementation targeting the reduction of K-12 absenteeism in the United States. For enhancing parental involvement ideas and processes, one could refer to Liu et al. (2020). Future research could be targeted by following up absenteeism episode of vulnerable students due to poverty and ethnicity with intervention connecting school activities and engaged parental participations for assessing specific students' outcomes.

Limitation

This study did not make any distinction between absenteeism types (truancy, chronic absenteeism or other possible sub-types) due to the given nature of the surveys we analyzed. Therefore, conclusions that are being made in relation to the parental involvement activities apply to overall absenteeism or non-attendance at school with or without an excuse, including legal or illegal reason, with parents being aware or unaware.

Authorship Contribution Statement

Islam: Contributed in conceptualization, funding, design, data acquisition, analysis and drafting of the manuscript. Shapla: Contributed in editing, interpretation, critical revision, overall supervision and final approval of the manuscript.

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