

Ohio House Bill 410 Disrupts the School-to-Prison Pipeline

By

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Abstract

Ohio House Bill 410 (HB 410) provided the reformation of zero-tolerance policies without the need to punish truant students by placing them out of school without the opportunity to continue learning. Truancy does not impose an immediate threat to school safety. HB 410 addresses the needs of schools for discipline that can maintain school safety while maximizing student opportunity to learn which supports the long term goal of decreasing chronic absenteeism rates of students in Ohio. This exploratory study was designed to show that the chronic absenteeism rates have decreased since implementation of Ohio House Bill 410. Statistical analysis was performed on data from the Ohio Department of Education for the years 2015 to 2018. It was found that for the entirety of Ohio the chronic absenteeism rates were decreased; however, the changes were not effective in large urban areas or Appalachia. These areas did not respond to this piece of legislation as well as the rest of the state of Ohio.

Keywords: EMIS, ODE, Truancy.

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Chapter 1

INTRODUCTION

Statement of the Problem

Truancy creates a precarious pathway within the school-to-prison pipeline. This pipeline is a process of criminalizing youth that is carried out by disciplinary policies and practices within schools that put students into contact with law enforcement. Once they are put into contact with law enforcement for disciplinary reasons, many are then pushed out of the educational environment and into the juvenile and criminal justice systems (Cole, 2019). Truancy often accounts for the bulk of status offenses brought to the attention of the court (Levesque, 2016). According to the Ohio Education Association (OEA) Vice President Scott DiMauro, in the 2013-2014 school year, there were approximately 21,900 incidents of student truancy in Ohio that resulted in some form of discipline. Similarly, the Juvenile Services Division in Nebraska found that 71% of the 721 status offenses were for habitual truancy for fiscal year 2016-17 (Administrative Office of the Courts and Probation, 2017).

Violations of attendance policies have sometimes been treated as criminal matters (Mallett, 2016). The use of the juvenile justice system makes truancy a feeder for the school-to-prison pipeline. Hedy Chang, the director of Attendance Works, a national and state-level initiative aimed at advancing student success by addressing chronic absence, stated, "Ninety-five percent tells you how many kids typically show up each day, it doesn't tell you which kids over time are missing so many school days they may be academically at risk" (O'Donnell, 2017). According to the Thomas B. Fordham Institute, Ohio has approximately 125,000 students per grade level, and if 95% of

students are present, that equates to 6,250 students at each grade level absent per day (Ohio Department of Education, 2019). Nearly 80% of students who dropped out of public high school were considered truant the previous year (National Center for Educational Statistics, 2015).

While the matter of criminalization of truancy is a matter for debate, its consequence cannot be overstated. In 2008, Eaton, Brener, and Kann discovered a connection between students who participated in risky health behaviors and unexcused absences. Compared to students who were never absent, students who were absent with parental permission were more likely to engage in 25 of 55 health risk behaviors identified in the study, and students who were absent without parental permission were significantly more likely to engage in 43 of those 55 health risk behaviors. Those students that missed school without parental permission had twice the odds of engaging in delinquent behavior as those that had permission. This study urged schools to recognize absenteeism for any reason as a warning sign of potential health risk behavior, e.g., alcohol, tobacco, sexual behavior, and illegal drugs.

Social learning theory is a social psychological perspective that sees individuals developing their sense of proper behavior from imitating those around them, such as family and friends (Bandura, 1969). Health risk behaviors such as alcohol, tobacco, and drug use are classic signs of socially learned deviant behavior according to Akers' modification of social learning theory (Piquero, 2016). This theory has four core elements. The first is differential association which refers to the interactions people have with others in their peer groups. This is where the process of social learning occurs. The second core element is definitions. This refers to the development of attitudes regarding conforming to or deviation from societal norms. The third core theoretical element is differential reinforcement which refers to the balance of punishment

or reward for the behavior. The fourth core element is imitation. This is where students directly observe the behaviors of others and model it. This is especially true when they observe others commit engage in deviance and receive its consequences. The evidence for social learning theory is strong (Piquero, 2016). Social learning theory specifies the mechanism responsible for similarity of delinquency level among friends or peer groups (Piquero, 2016). As an Attendance Officer for Lorain County, I have experienced first-hand that accountability associated with truancy has as much to do with the parents as with the students. I am the forerunner of the office in being “that guy” that will, upon evidence, charge the parents along with the student when I witness neglectful behavior. I have had caseloads in the hundreds knowing that it is not possible to see them all in a week. I see deviance run in school clicks, families, and gangs outside of the schools. I can actually sit back and watch Akers’ social learning theory unfold before my eyes. They see someone they admire or hang around with do something deviant with no punishment, and then imitate that behavior. This is especially true when parents condone, or do not appropriately punish the behavior.

Although the educational and the juvenile justice system seem to be parallel in intent, the majority of research on the school-to-prison pipeline is currently anecdotal or descriptive. This study fills this gap in the literature through a study of the effects of Ohio House Bill 410 (HB 410), which went into effect in April 2017. The most significant point of change is it prevents schools from expelling or issuing out-of-school suspensions to students for truancy, thus keeping many youths from entering the pipeline simply because of absence related issues at school. The law applies to traditional public schools, charter schools, joint vocational schools, e-schools, dropout prevention, and recovery schools which cannot maintain a 5% or lower chronic absenteeism rate.

I posit that the decriminalization of truancy correlates to a decrease in chronic absenteeism. The methodology involves analyzing data on chronic absenteeism from the Education Management Information Systems (EMIS) of the Ohio Department of Education (ODE). A statistical analysis explores absenteeism rates of Ohio public schools before and after HB 410 went into effect.

Purpose of the Study

The purpose of this study is to explore whether the HB 410 has made a dent into the plague of chronic absenteeism in high schools of Ohio and whether the difference is significant. The study, exploratory and quantitative in nature, uses the data reported in EMIS regarding chronic absenteeism before and after the implementation of HB 410. In addition, this paper gives special attention to the Appalachian region of Ohio. Much attention in news coverage and policy discussions in Ohio focus on large urban settings, but many of the poorest performing areas of Ohio are all located in the areas to the eastern and southern borders. This area known as Appalachian Ohio has been identified as a geographical area where individuals have less motivation to seek higher education than many other areas of Ohio.

This study is important for school officials and administration and of utmost importance, parents. The study is important due to academic performance, school report card data, school funding, and the future of Ohio students.

Significance of the Study

According to Skiba et al. (2008), “The increased reliance on severe consequences in response to student disruption has resulted in an increase of referrals to the juvenile justice system for infractions that were once handled in the school.” School districts

suspended students for cutting class or skipping days. The suspension was either in-school or out-of-school for truancy. Many of these occurrences led to contact with the juvenile justice system. Research indicates that many schools appear to be overusing the juvenile justice system for infractions of school attendance. However, since HB 410, school districts can now focus on disciplinary occurrences that relate to the health and safety of our student body rather than truancy, which is not a health or safety concern.

HB 410 prohibits suspensions and expulsions as penalties solely because of unexcused absences under a school district's zero-tolerance policy. According to the DiMauro (2019), "pre-determined consequences do not deter student misbehavior or promote learning." The report concluded that zero-tolerance policies often lead to higher dropout rates and an increase in poor behavior. HB 410 has decriminalized truancy to combat truancy labels and allow the juveniles to remain active in their studies. This policy overturns previous policies that apply consequences without consideration of the associated circumstances for issues that do not involve the safety of others. Punishments for truancy were counter-productive. HB 410 includes a requirement for the State Board of Education to develop a policy on preventative strategies and alternatives for excessively absent students, while keeping legal intervention available as necessary. At the Representative Assembly in December 2013, members of the Ohio Education Association (OEA) overwhelmingly agreed and adopted legislative policy on school discipline.

There is no question that attendance is an ongoing issue that must be dealt with in education. To affect student absence rates, administrators, truancy committees, and truancy officers need to understand the situations of students, parents, and even

sometimes faculty. The ability to recognize and aide in the remedy of those situations is what is crucial for the students. In many cases, it is simply the introduction of the legitimacy of authority that makes the students and parents or guardians realize this is not permissible anymore and that there is accountability in these actions. Many of these initial meetings with the parents or guardians with attendance officers are the first line of defense for school districts.

Limitations of the Study

This study was conducted to determine if chronic absenteeism rates have decreased in Ohio high schools since the implementation of HB 410. This report is based on EMIS data from the Ohio Department of Education. This study does not include charter schools, dropout schools or joint vocational schools. This study did not include any variables other than student poverty, geographic location, years of study, and typology. There may be unseen confounding variables.

Definition of Terms

Appalachian Ohio: The 32 poorest counties of Ohio covering 16,033 square miles on the eastern and southern borders of the state.

Chronic absenteeism: Missing 10% or more of the school year for any reason.

Chronic truant: A student that has missed 10% of the school year for excused or unexcused absences. This offense has been removed from the law (Ohio House Bill 410 Requirements, 2017).

Economically disadvantaged: Students who receive economic support through the federal Title 1 grant program. Schools with large concentrations of low-income students will receive supplemental funds to assist in meeting student's educational goals which

include the free and reduced lunch program.

EMIS is a statewide data collection system for Ohio's primary and secondary education, including demographic information, attendance, course information, financial data, and test results (Ohio Department of Education, 2015a)

Excessive absences: Absent 38 or more hours in one month with or without a legitimate excuse; or absent 65 or more hours in one school year with or without a legitimate excuse. (Ohio House Bill 410 Requirements, 2017).

Expulsion: Removal of a student from school by the superintendent or a school principal due to discipline reasons.

Habitual truant: Absent 30 or more consecutive hours without a legitimate excuse; absent 42 or more hours in one month without a legitimate excuse; or absent 72 or more hours in one year without a legitimate excuse (Ohio House Bill Requirements, 2017)

Out-of-school suspension: Denial of attendance at school by the superintendent or a school principal due to discipline reasons

School-to-prison pipeline: A process through which students are pushed out of schools due to discipline policies. and put into contact with law enforcement. Once this starts, many are then pushed out of the educational environment and into the juvenile and criminal justice systems.

Social learning theory: The theory that people engage in deviant behavior when they see it as justified, or when people they associate with are committing deviant behavior.

Maladaptive child rearing practice is the reason that certain people are predisposed to criminal behavior.

Suspension: A disciplinary action by the superintendent or a school principal that

removes a student from school for a definite period of time.

Title 1: Title 1 is a part of the No Child Left Behind Act of 2001 (NCLB). This act provides federal funds through the Ohio Department of Education to local educational agencies (LEAs) and public schools with high numbers or percentages of poor children to help ensure that all children meet challenging state academic content and student academic achievement standards (Ohio Department of Education Federal Programs, 2015).

Truancy: An unexcused absence from school.

Chapter 2

LITERATURE REVIEW

This paper explored 25 published peer-reviewed articles and the relationship between truancy reforms and their outcomes with various results. Many studies and experiments have been done in an attempt to discern whether evidence-based practice programs or zero-tolerance policies have been beneficial to a reduction in truancy. School districts must report and intervene in the truancy process, but the responsibility lies with the parent or guardian. There are significant gaps that remain between student groups associated with socioeconomic status, special education status, and location of schools, of which none seem to matter if the root cause of truancy is not handled accordingly at the residence of the child.

Several previous studies have either no evidence or mixed results due to a lack of data recorded by the school districts to the appropriate data agency. All truancy programs have a short-term goal of improving attendance but also have longer-term goals of raising grades and graduation rates. Shown in the literature review, many studies resulted in mixed findings. The search engines and databases used include ebshost.com, education.ohio.gov, crimesolutions.gov, legislature.ohio.gov, and ohea.gov. Keywords searched for included the following: state legislation of truancy, legality of absenteeism, accountability of truancy laws, targeted truancy interventions (TTI). There were no results found for HB 410 itself, though the bill and its significance are also discussed in this chapter along with the importance of a unique look at Appalachian region of the state.

The State of the Literature on Truancy

Several studies showed positive effects of TTI programs, while others showed negative. There are studies that showed that absenteeism can be reduced, while others

disagreed. The effects of truancy interventions are unclear.

Studies of Little Significant Evidence that Truancy Programs Work

Moore and Hobbs (2017) reported an extensive literature review and found there was surprisingly little data that led to directly testing the assumptions of a zero-tolerance approach of school discipline. The data available yielded contradictory findings. Due to a lack of data in this study, it concluded a negative effect on the relationship between education and the juvenile justice system. Similarly, an analysis by Poiner et al. (2018) used Arkansas as a case study to estimate the impact of a state-level ban on the use of OSS (out-of-school suspension) for truancy on attendance, it found no evidence of improvement in attendance for those students determined truant. In further support of this finding, Anderson et al. (2019) found that involvement in TIP (Truancy Intervention Program) did not improve either short-term or long-term attendance among truant students. Likewise, a study by McNeely et al. (2019) evaluated the effectiveness of a court diversion program designed to improve school attendance among chronically absent students. This quasi-experimental study noted that the pattern of finding was not robust enough to conclude that the TIP influenced school attendance.

Studies of Significant Evidence that Truancy Programs Work

Previous studies from Poiner et al. (2018) show positive results for truancy practices and stated that an analysis of TTI evidence ratings for outcomes on education showed a positive effect. This study combined results across 16 different studies. It was found that truancy interventions had a significant overall positive and moderate mean effect on truant attendances. Overall, the Targeted Truancy Interventions improved their attendance by an average of almost 5 days. Comparably, research by Klima, Tali, Miller,

and Nunlist (2009) combined the findings from 35 outcomes across 22 studies. The authors found that, overall, interventions designed to decrease truancy demonstrated a positive, though small, effect ($ES=0.191$). Mazerolle et al. (2018) implicated promising school attendance rates by using the police–school partnership intervention and increased parental awareness of likelihood of prosecution, which moderated students' self-reported willingness to attend school.

In 2017, Mazerolle et al. concluded that educating parents that it is ultimately their responsibility to send their children to school made a difference by responsive regulation. This also involved parental warning letters for noncompliance. Noncompliance leads to escalating punitive consequences to coerce compliance among parents. These can be notices of prosecution, usually as last resort. The responsive regulatory model fosters voluntary compliance by increasing perceptions of the legitimacy of the law, and increasing willing compliance so that escalations do not proceed. The process model of policing shows how procedurally just encounters have positive effects on parents' perceptions of police legitimacy and willingness to comply. This study compared students in control or comparison groups, and students served by the program showed significant decreases in truancy, decreases in absenteeism, decreases in dropout rates, and increases in school completion. School-police partnerships that communicate to parents, their legal responsibilities for their children to attend school hold promise for increasing a truanting young person's willingness to go to school.

Absences

Some students skip school without a cause. Parents also excuse their children from missing some days of school for family vacations or issues that they may have at

home. In 2008, Eaton, Brener, and Kann concluded that there "were different types of parent-condoned absenteeism, related to parental personality, their own school experience and achievement, and the history of their relationship with their child." Many of these parents allow truancy with no regard for the law. When the parent displays this lack of support for the education system, it is assumed that by social learning theory the students imitate that same behavior.

There is a plethora of research and information available about the consequence of student absences. Ultimately, chronic absences and risk behaviors may lead to the most devastating category concerning attendance, dropouts. They risk depression, alienation, the use of alcohol, tobacco, illegal drugs, participate in violent behavior, and can end up incarcerated (Franklin et al., 2007). Those who drop out of school face higher unemployment rates and earn lower salaries when employed.

Student perceptions on attendance and their educational expectations impact educational aspirations and overall attendance. One specific perception of students that affect their attendance is the perceived response of their parents or guardians. Students' perceptions of school attendance varied with the perception of parental discipline. Students who knew they were not going to be in trouble were more inclined to miss school. Attendance is often linked with the socioeconomic status of parents, neglect, and criminal history. Students were most likely to request an absence based upon how they perceived their parents to respond (Sheppard, 2007).

There are consequences for schools when students drop out as well. Federal funding is based upon the number of students who are enrolled at the school. The Adequate Yearly Progress (AYP) in the No Child Left Behind Legislation includes the percentage of dropouts

(U.S. Department of Education, 2001). Failure to meet the designated number of indicators can result in lower school ratings and even legislative action or state takeovers.

Ohio HB 410 Overview

HB 410 offers positive alternatives to the legal system to reduce overall truancy and keep students in the learning environment. The inaccurate reporting systems have been corrected through legislation and can now be used to accurately make the much-needed correlations we have been seeking. Ohio needed a preventative approach to excessive absences and truancy. Ohio HB 410 was sponsored by Reps. Rezabek and Hayes, and may be the saving grace. According to the detailed fiscal analysis overview of the Ohio Legislature on HB 410 (2015), the bill makes several changes to the law regarding habitual and chronic truancy and compulsory school attendance to keep children, who may otherwise be suspended or expelled, in school. To do so, the bill prohibits school suspensions or expulsions solely based on unexcused absences and requires a series of successive interventions by school districts or juvenile courts before a criminal complaint is considered. The bill also includes additional data reporting requirements (House Bill 410 Requirements, 2017).

Legal Requirements

For school districts, effective July 1, 2016, the bill prohibits any public school from suspending or expelling a student or otherwise prohibiting attendance solely based on a student's unexcused absences. Further, public districts and schools may only file truancy cases in the juvenile court system after a child refuses to take part in or fails to complete additional interventions required by the bill. Public districts and schools must also adopt new or amended policies to aide the employees involved in addressing student

absences. Under the bill, schools are required to notify parents within seven days after a student meets absence limits. Within ten days after a student reaches the habitual truant level, the bill requires the student to be assigned to an absence intervention team that must consist of a school or district administrator, a teacher, and the child's parent or guardian. It may also include a school psychologist, counselor, social worker, or an outside agency or nonprofit entity that may assist students and families in reducing absences. Within 30 days of the assignment, the team must develop an intervention plan tailored to the student, to reduce or eliminate further absences. The bill also requires each school district to report data to ODE at each step of the truancy process (Ohio House Bill 410. 2015). This requirement will result in additional administrative responsibilities for school districts, the significance of which is dependent upon the truancy rates for any given school or district. The schools that work the smartest to resolve truancy alleviate their administrative duties due to truancy issues.

For the juvenile courts, under the bill, if a child refuses to take part in or fails to complete the absence intervention plan, the district or school may file a complaint in the county court alleging the child is unruly. This is in contrast to current law, which only requires a child's absences to surpass the threshold for a habitual truant before the school must take appropriate action under its absence policy or file a complaint with the juvenile court. Further, the bill requires a juvenile court to postpone a complaint that a child is unruly based on the child's habitual truancy pending the child's completion of or failure to comply with a diversion program and requires the court or agency appointed by the court to develop that diversion program. The diversion program must be developed within 30 days after the complaint is filed and must include specific goals and timelines for the

student to complete. If the student completes the program, the court dismisses the complaint. If the child fails to make progress toward the completion of the program, the court must then modify the program or consider the complaint. The bill also permits a school district to request a juvenile court to enroll a child in a diversion program as part of the student's absence intervention plan.

For the county and municipal courts, the bill specifies an act that tends to cause a child to be a chronic truant is a first-degree misdemeanor. Parents or guardians that fail to send a child to school may be fined up to \$500, and be required to serve community service up to 70 hours. According to the Ohio Judicial Conference, violations are likely to be infrequent and the cost will be minimal at most. Likely, the revenues collected from violators will offset costs that counties incur to process cases.

House Bill 410 changes tardiness for students. If any student arrives more than thirty minutes after the start of the school day they may be ineligible to participate in any or all extracurricular activities on that day. This includes practices as well as contests, performances, and all other extracurricular activities. These changes have been called drastic and unconventional, but they appear to work.

Many parents or guardians are unaware of House Bill 204 that accompanies House Bill 410. House Bill 204 requires the Bureau of Motor Vehicles to revoke the driver's license of any student who drops out of school. Dropouts may receive licenses once they reach the age of 18, return to school, or receive a GED certificate. House Bill 204 also allows the denial or revocation of a student's driver's license in two (2) other situations: Nonattendance or habitual absence and if students are expelled or suspended

from school for use or possession of alcohol or drugs at the discretion of the superintendent (Ohio House Bill 410 Requirements, 2017).

Monitoring Student Absences

Before the acceptance of HB 410 high school dropout and absentee rates were not uniform and were difficult to interpret. According to the National Dropout Prevention Center (2020), the rates were very different from the actual ones. When students stop attending, administration could assume they moved away instead of counting them as a dropout. It was a general practice to not count individual students, so if you did not even start your senior year, you were not counted as dropping out, you were simply left out of the equation for calculating the percentages. According to an article by Bush (2015), a former Columbus school administrator plead guilty to this very data-scandal, stating “Dodds was a principal when Tankovich first told him it was legal to remove students from the district rolls -- as if they had moved away -- even if they really were just absent a lot.” Ohio has since kept a watchful eye on the statistics.

HB 410 requires student absences to be counted by the hour instead of the old policy that measured absences in days, in which a student could arrive an hour late or leave an hour early and still be considered “present” for the day. HB 410 being measured in hours, means students would be counted as absent for exactly two hours, not half a day. This data is reported to the EMIS system. We now have a much clearer data set to draw from using the EMIS, a statewide data collection system for Ohio's primary and secondary education, including demographic information, attendance, course information, financial data, and test results.

Appalachian Ohio

In this thesis, special attention is given to the problem of truancy in the Appalachian region of Ohio. A region of 32 counties (Figure 1), it would if it were its own state constitute the second most “economically depressed” area of the U.S. (Higgins, 2019) as determined by the unemployment rate, income, and poverty. Higgins (2019) showed that the Appalachian counties of Ohio together scored an average of 142.5 in terms of economic distress in 2009 versus a score of 99.6 for Ohio’s remaining 56 counties (a lower number represents a healthier economy). For 2019, Appalachian Ohio improved to a mark of 138.6 while the rest of Ohio worsened to 100.7. West Virginia ranks as one of the poorest states, yet its economy is better than the Appalachian portion of Ohio.

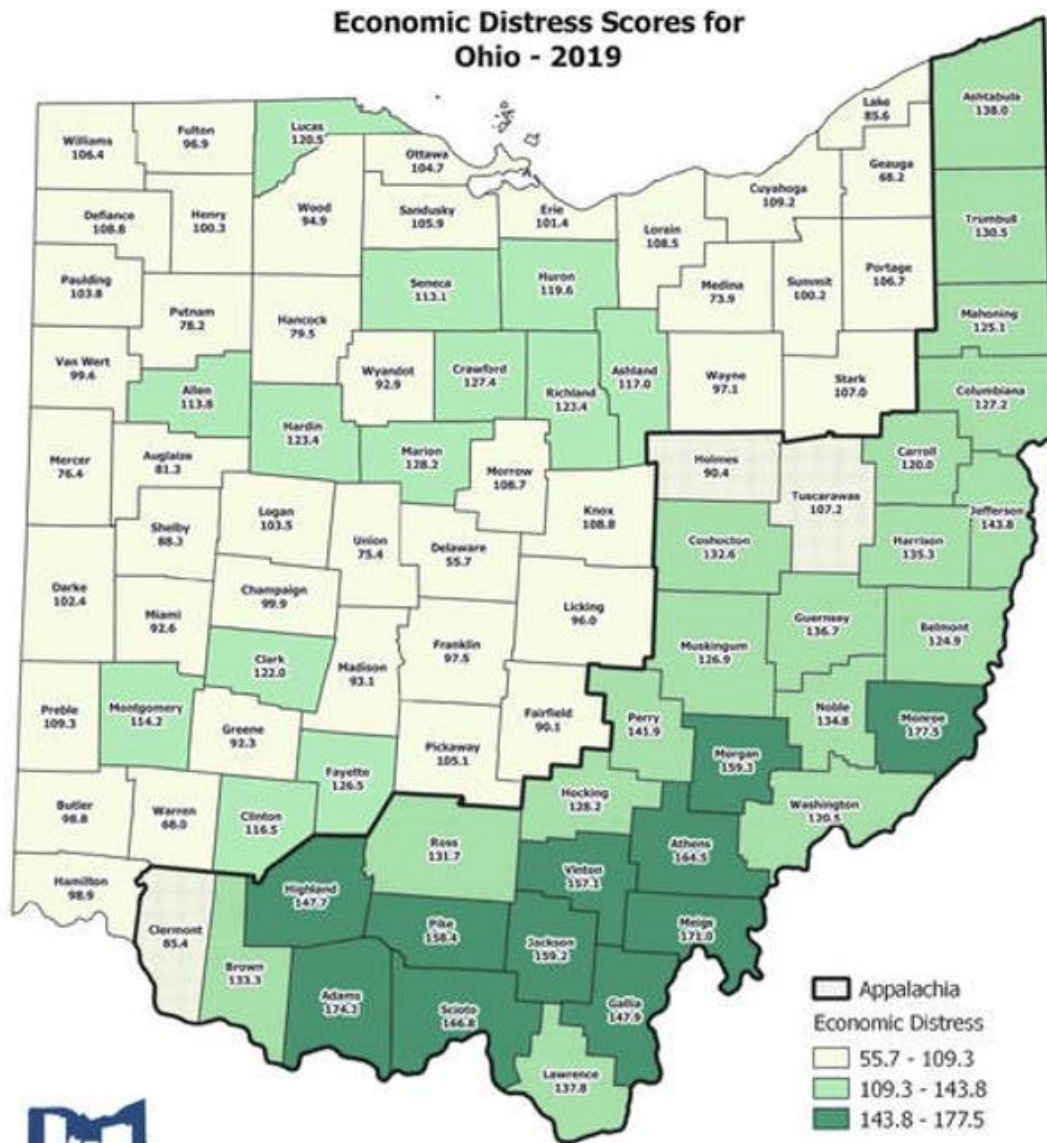
Appalachia remains the most distressed region of our state. Ohio Appalachian Center for Higher Education (2020) states that Appalachian counties of Ohio are characterized by low education attainment of the regions citizens, and mentions the region’s college-going student rate is currently only half the national average. There is a large difference between Appalachia and the remainder of the state in chronic absenteeism, with Appalachia being much higher.

Theoretical Framework

Social learning theory implies that deviance behavior is increases when a person associates with others view deviance positively and give it favorable feedback (Bandura, 1969; Piquero, 2016). Specifically, should an individual associate with peers or other groups that hold attitudes favorable toward violations of the law and show pro-criminal or pro-deviant attitudes and values, then it is expected that the probability that the individual would engage in deviant behavior would be increased. This increases as time

spent with the behavior. In other words, if someone sees another person rewarded for a deviant act, then an individual may in turn engage in the same behavior as a result of imitation. This theory explains the phenomenon of the group behavior seen with truancy in geographical clusters associated with poverty, such as the large urban areas and Appalachian areas of Ohio. The areas of Ohio in Typology 8 all display the same distinct problem with chronic absenteeism that the areas in Appalachian Ohio display. All of these areas are socioeconomically depressed. Consequently if you were born and raised in these areas, then you value education less than people in affluent areas.

Figure 1. *Economic Distress Scores for Ohio*



The Appalachian Regional Commission (ARC) uses an index-based county economic classification system to identify and monitor the economic status of Appalachian counties. The system involves the creation of a national index of county economic status through a comparison of each county's averages for three economic indicators—three-year average unemployment rate, per capita market income, and poverty rate—with national averages. The resulting values are summed and averaged to create a composite index value for each county.

Source: <https://www.ohio.edu/chsp/0-7>

Chapter 3

METHODOLOGY

Design of the Study

The analytical strategy was a longitudinal analysis of chronic absenteeism using a multilevel mixed model is performed for HB 410, being an intervention. The preferred model when doing longitudinal panel studies with gradual temporal changes is a multilevel model (MLM).

All data for this statistical study is public use and was taken from the Ohio Department of Education website (Ohio Department of Education, 2020). The Ohio Department of Education (ODE) has listed 607 public high schools. There is one observation per district per each school year from 2015 to 2018, which results in a total of 2,428 observations. This number reduces to 2,423 observations because of a small number of missing values for chronic absenteeism. Each year in the study was used as an independent variable along with student poverty.

Dependent and Independent Variables

The dependent variable is chronic absenteeism for the school years 2015 to 2018. The intervention and Appalachian location are the independent variables in this model. The effects of the intervention of Ohio HB 410 are measured using the school year as a variable with the MLM. The year 2015 is the preintervention year, and the years 2016-2018 reveal what happened in the aftermath. The ODE does not discern which counties are Appalachian, so data regarding Appalachian Ohio was collected from the Ohio Appalachian Center for Higher Education website (Figure 1).

Socioeconomic Control Variables

The ODE uses a typology based on socioeconomic metrics for research purposes. With the availability of 2010 census data ODE revised the typology for 2013. This is the newest typology to date. It was created using several data sources to classify like districts together based on shared demographic and geographic characteristics. These classifications can serve as a basis for a stratified sample of districts in the state. These classifications also allow researchers to focus on a specific type of district, such as major urban districts or rural districts with very high poverty. These typology classifications are described in Table 1. Typology 8 includes some of the largest and most troubled urban districts in Ohio, including the highly publicized problems of the Youngstown and Elyria school districts.

Student poverty was added to control for linear effects. Student poverty was measured from median income of the district. Student poverty mean is 41.33 percent for Ohio with a standard deviation of 18.67.

Analytic Strategy

This study used a multilevel model (MLM), also known as a hierarchical regression, with repeated measures. This approach provides many advantages to the study of longitudinal cross-sectional panels, randomized clinical trials, and intervention studies such as this one (Field, 2018; Hilbert et al., 2019). There are three reasons for using MLM as opposed to other statistical approaches. First, it allows for the inclusion of more variables and time periods than t-tests. Second, the approach can incorporate an autoregressive term. In other words, some school districts always tend to have low chronic absenteeism rates and

some have high, which makes the best predictor of chronic absenteeism in any district the absentee rate of the previous year, thus confounding the measurement of any intervention. Finally, time can be used as an independent variable, a feature not available in standard repeated-measures ANOVA and MANOVA models. The statistical software used was IBM SPSS V.26, which uses a default is Satterthwaite for degrees of freedom calculations (Glen, 2013).

Table 1

Ohio School District Typology, 2013

Typology Code	Major Grouping	Full Descriptor	# Districts	# Students
1	Rural	High Student Poverty & Small Student Population	124	170,000
2	Rural	Average Student Poverty & Very Small Student Population	107	110,000
3	Small Town	Low Student Poverty & Small Student Population	111	185,000
4	Small Town	High Student Poverty & Average Student Population	89	200,000
5	Suburban	Low Student Poverty & Average Student Population	77	320,000
6	Suburban	Very Low Student Poverty & Large Student Population	46	240,000
7	Urban	High Student Poverty & Average Student Population	47	210,000
8	Urban	Very High Student Poverty & Very Large Student Population	8	200,000

Source: Ohio Department of Education (2015b)

The school year (time) is used as a repeated effect, and in MLM can also be treated like an independent variable as well. As an independent variable, school year captures the intervention of HB 410—the year 2015 was pre-intervention and the remaining years post

intervention.

Additionally, the treatment of time as a continuous instead of discrete variable in MLM can increase the statistical power for detecting the growth effects (Muthén & Curran, 1997). Unbalanced data and unequal spacing conditions can be flexibly handled under MLM through adequate specification of the time predictor. In MLM, there is great flexibility in specifying the variance-covariance structure of longitudinal data (Chi & Reinsel, 1988; Diggle, 1988; Laird & Ware, 1982; Jones & Boadi-Boateng, 1991; Wolfinger, 1993). MLM can also combine the advantages of individual growth-curve analysis with the examination of interactions of treatment with time. Specifically, because MLM separates the random effects into two parts (between-subject random effects and within-subject random errors), MLM allows for the examination of new effects of interest such as cross-level interaction effects.

MLM models are developed in steps, and the process proposed by *Repeated Measures Using Mixed SPSS* by Scott Parrott (2014) is used (Table 3, in next chapter). Chronic absenteeism is the dependent variable in all models. Model 1 is the null model using the school district number (IRN) as the within-subjects data at level 2 and time as a repeated measure with no predictors. Compound symmetry was used as a covariance structure because it is roughly the assumption we would make when time point measures have the same homogeneous variances and we also have symmetry where the variance between each one of the time points is the same. The time variable is used as an independent variable and also as a fixed effect in the model. No random effects are used in this model, so estimation is maximum likelihood. The time variable is used for the estimated marginal means for each one of the time points. This shows what the estimated change in chronic absenteeism at each year interval, as a mean. This gives the baseline model. The remaining

models will be compared to that baseline.

Model 2 involves changing the covariance structure in order to account for the repeated measurement of time, and in Model 3 that autoregressive effect is added. Model 3 accomplishes this through changing the covariance structure to AR: heterogeneous, which allows for heterogeneous variances at the different time points and that the measures at the different time points are related. This structure assumes that the strength of the correlation between each adjacent time point is getting weaker over time. The remaining variables then are added in Model 4.

Hypotheses

The expectations of this exploratory study are finding meaningful differences in the chronic absenteeism rates of Ohio from before House Bill 410 went into effect (2015-2016), and after (2018-2019). This study will observe:

1. The likelihood that HB 410 has decreased chronic absenteeism for public high schools in Ohio.
2. The likelihood that living in Appalachian Ohio is related to increased chronic absenteeism.

Chapter 4

RESULTS

In this chapter, the data collected from the Ohio Department of Education are compared, utilizing different statistical methods, to determine similarities and differences in chronic absenteeism. The primary comparison is by chronic absenteeism rates. Interpretations and implications of these comparisons are discussed.

Longitudinal Changes in Chronic Absenteeism

The importance of this study is to examine the absentee rates of Ohio schools before House Bill 410 and after the implementation of House Bill 410. Overall, the results of this study show that schools have decreased absenteeism rates as a result. It also shows that schools in large urban areas and Appalachian regions are still struggling. This data should be used to determine revisions of policy and interventions in concern with students' attendance within the large urban areas and Appalachian regions. Because of the time between HB 410's effective date and its full implementation, truancy between the two school years spanning the calendar year were treated differently. Since chronic truancy was eliminated effective April 4, 2017, any cases filed with the court after this date but before the end of the 2016-2017 school year were filed as habitual truancy matters to the courts. However, they were not referred to an alternative to adjudication as this legislative piece did not go into effect until the 2017-2018 school year. Therefore, the comparison for chronic absenteeism should be between the 2015-2016 school year and 2018-2019 school year as 2017 involved many stages of change. This reasoned the longitudinal study.

For the entire state of Ohio, regardless of demographics, chronic absenteeism

rate reduced from 14.65 in the preintervention year of 2015 to 11.35 in 2016 (Table 2). It remained below preintervention levels in 2017 and 2018, though it has been trending upward.

Table 2

Chronic Absenteeism in Ohio: District Means by Year

Year	N	Mean
2015	607	14.65
2016	603	11.35
2017	606	11.54
2018	607	12.56

The Typology and Chronic Absenteeism

Table 3 shows that all typologies except Typology 8 improved chronic absenteeism from 2015-16 to 2018-19. The largest urban areas (Typology 8) did not respond well to this legislation. These places did not have any improvements at all, and actually increased the absenteeism rate since HB 410. Typology 7 decreased absenteeism in 2016-17 and 2017-2018. However, went right back to the same level it had in 2015-16 in the 2018-19 year.

Non-Appalachian areas improved significantly more than Appalachian, which returned to almost the same level it had in 2015-16 in 2018-19. Social learning theory would explain the continuation of higher chronic absenteeism rates, as this is rooted in their surroundings. Social learning theory refers to the

probability that persons will engage in behavior that their peer groups belong to. This includes their neighbors, school mates, authority figures and online friends. Akers' social learning theory is based on imitation. If your entire geographical area does not see value in education, you are also likely to not see value in it.

Table 3

Chronic Absenteeism by District Typology and Appalachian Region

	N	% of Pop.	2015	2016	2017	2018
Typology 1	123	20.30	14.78	11.32	11.98	12.82
Typology 2	106	17.50	12.20	9.92	9.23	9.24
Typology 3	111	18.30	11.57	8.56	8.60	9.52
Typology 4	89	14.70	18.47	15.16	15.52	16.24
Typology 5	77	12.70	13.09	9.28	9.89	10.94
Typology 6	46	7.60	9.60	5.78	5.94	6.64
Typology 7	47	7.70	25.63	17.10	20.24	24.64
Typology 8	8	1.30	25.03	44.96	39.59	32.63
Appalachian	168	27.70	16.47	14.82	15.13	15.68
Non Appalachian	439	72.30	13.95	10.01	10.16	11.3

Across all four years of this study, there are consistent significant differences between student populations in large urban areas relative to all other topologies. The largest urban areas (Typology 8) have had a significant increase in chronic absenteeism after HB 410. All other topologies have decreased in absenteeism since the implementation of HB 410.

The data from 2015-16 show there was a difference of 5.97% from urban to nonurban chronic absenteeism rates. In 2018-19 there was an increase in that difference to 9.68%, widening the gap between urban and nonurban absenteeism rates since HB 410. While chronic absenteeism has improved in 7 of 8 of Ohio topologies, large urban areas are still struggling. One would almost certainly attest this is due to Akers' social learning theory as almost the entirety of urban areas mirror this deviant behavior. Considering the

current state of the voluminous literature that reports tests of Akers' social learning theory, it is readily apparent and often argued to be one of the most consistent and relevant explanations of crime and deviance (Piquero, 2016). The higher rates of juvenile crime among children from disadvantaged families increases with the accrual adverse circumstances and negative influences (Fergusson et al., 2004).

There is a relationship between living in Appalachian Ohio and chronic absenteeism. Across all four years of this study non-Appalachian areas scored less than state average and Appalachian areas higher. There was a change in chronic absenteeism for Appalachian regions of 16.47% in 2015-2016 to 15.68% in 2018-2019, a decrease of 0.79%. However, non-Appalachian Ohio decreased chronic absenteeism by 2.15% overall since HB 410. While areas in Appalachian Ohio are still struggling economically, they are also still struggling with chronic absenteeism. As in urban areas, Akers' social learning theory would certainly explain this phenomenon as the entire region has been identified as low education attainment. They are imitating their surroundings.

MLM Model

The unadjusted model confirmed that the annual differences in chronic absenteeism were statistically difference from the preintervention year of 2015 (Table 4). Typology 8, which contained the most troubled urban schools, stood out for its difference from the reference category. Chronic absenteeism increased in the Appalachian region.

X^2 statistics for the stages of development were calculated manually by subtract the AIC and degree of freedom numbers between models. At each stage, incremental changes in the model were statistically significant, indicating that the use of MLM was appropriate. The change between Models 1 and 2 was $X^2(5,2419)=976.81$, $p<.001$. The change between Models 2 and 3 was $X^2(3,2419)=194.02$, $p<.001$. The change between

Models 3 and 4 was $X^2(9,2419)=731.28, p<.001$.

The final model, Model 4, shows that troubled urban districts (Typology 8) and Appalachia have issues with chronic absenteeism independent of the controls for time and poverty.

Table 4

Longitudinal Analysis of Chronic Absenteeism

	Unadjusted	Model 1	Model 2	Model 3	Model 4
Constant		12.53*	14.65*	14.65*	1.41
Year (ref=Year)					
2016	-3.30*		-3.28*	-3.28*	-3.28*
2017	-3.09*		-3.06*	-3.06*	-3.07*
2018	-2.10*		-2.09*	-2.09*	-2.10*
Appalachian	2.15*				2.03*
Student Poverty	.23*				.26*
District Typology (ref=Typology 1)					
Typology 2	.14				-.37
Typology 3	1.35*				1.69*
Typology 4	2.76*				2.44*
Typology 5	3.41*				3.94*
Typology 6	3.59*				4.21*
Typology 7	6.09*				7.68*
Typology 8	13.08*				10.67*
Autoregression				.29*	.33*
AIC		17447.44*	16470.63*	16276.61*	15545.33*
df		2	7	10	19

Note: p<.10 *p<.05

Chapter 5

DISCUSSION

Both hypotheses were supported. In its entirety, Ohio has decreased chronic absenteeism by 2.09%. However economically disadvantaged areas such as large urban areas did not respond to legislative change as well as the rest of the state. Appalachia did not perform as poorly as the most troubled urban areas, but the two areas share a common issue in that the long-term effects of antitruancy legislation are questionable.

Schools in Ohio are required to control and maintain graduation rates and chronic absenteeism, but the percentage of economic disadvantage is only a part of what they are combating. Parents need to require their child attend school. Brittany Miracle, Program Administrator for the Ohio Department of Education states, “Getting to class is the first step to academic success” (Miracle, 2018). Parents or guardians would, by ensuring their child’s attendance, also ensure their future and education. The alternative is the risk of them having a less economically satisfying, possibly criminal future. Parents or guardian may be charged with failure to send a child to school or have to pay high court costs due to chronic absenteeism. Poor attendance can lead to negative consequences for the rest of their lives, such as the school-to-prison pipeline if left unchecked.

Unfortunately, not all students will have the same support from their personal and social connections. Some families have more positive relationships between home and school than others. Parents' involvement in their child's education can be affected by many variables. Socioeconomic status, school support, and their support systems can all influence a student's parents'

involvement in their education. This leaves educators with the task of initiating and building positive connections with parents and the community. Schools must evaluate policies, develop plans, and take action if they are going to have a positive impact on attendance rates.

Our educational systems were not designed to combat poverty itself but to promote education and graduation so that those in each typology and every Appalachian area receive the same chances at receiving quality education. Schools need to build and coordinate local resources to promote an understanding of the attendance issue, partnerships between schools and social services, and developing projects and programs that prevent student absenteeism. Ensuring parental involvement is important as well. According to the National Center for School Engagement (2015), when parents are involved, students tend to achieve more, regardless of socio-economic status, ethnic/racial background or parents' education level.

The large urban and Appalachian areas of Ohio are still very economically disadvantaged, this plays a factor in all things related to school, transportation, lunch, school supplies, internet access, and laptops for homework. Although Ohio HB 410 seems to be helping, there is still more work to be done to get the economically impaired up to the rest of the state of Ohio. The lingering issue behind legislative mandate is that these programs cannot change behavior or economic status in troubled areas. District programs and state policies do not work without parental assistance. As the study from Fergusson et al. (2004) shows, childhood economic disadvantage leads to crime. The social learning

perspective In recent years criminological explanations have come to be dominated by a social learning model which argues that variations in rates of crime are largely the reflection of variations in early learning experiences that act to predispose young people to offending. These theories have emphasized the ways in which patterns of maladaptive child rearing and supervision encourage the development of crime. This model would imply that differences in rates of crime across social strata are largely due to child-rearing practices.

Limitations of the Study

Ohio has 607 public high schools. No private, charter or other alternative schools were included. All statistical data came from the Ohio Department of Education. This assumes correctness and truthfulness in reporting. It is possible that the troubled areas of Ohio might still be changing and this study did not give enough time.

Future Studies

This study is meant to be a beginning in analyzing chronic absenteeism rates of Ohio and whether there was significant data related to the typology, poverty level and whether they were located in Appalachia. This study should be repeated and focused on the areas located in Typology 8 and Appalachia for moderating effects to determine if more can be understood about their unique patterns of chronic absenteeism and the minimal impact of antitruancy legislation. These are the areas left almost unchanged by HB 410. I also recommend future studies on changes in the measure of adjudicated youth as a result of changes in legislation. I also recommend analyzing charges related to failure to send a child to school. It is still unclear why Appalachian counties of Ohio are

characterized by low education attainment and why college-going student rate is so low compared to the rest. This should also be investigated in future studies. Overall, there were positive results found in this study; however, it shows that the behavior of our youth in low income areas and low education attainment areas did not benefit from this piece of legislation. These are the very youth that are at the highest risk of entering the school-to-prison pipeline. Although this study did not lead to strong results, they clearly imply that effective policies to address linkages between low income and crime cannot be legislated into the behavior of our youth. To combat the root cause of delinquency and criminal behavior will require future policies or interventions that: (a) reduce the amount of exposure of low socioeconomic status children to adverse environments within the family; (b) address the development of early conduct problems; (c) act to mitigate the effects of exposure to deviant peer groups; and (d) parent training. With this being said, it is equivalent to suggesting “retrain the parents to be more effective”. However, that is ultimately an infringement of their rights. It is likely that the most effective approach will be a strategy that combines changes in factors such as unemployment, family income and housing with targeted interventions designed to help at-risk children and their families who are disproportionately represented by low income status. Programs such as family support, parenting programs, and family economic support may help to mitigate the risks of delinquency and crime in our youth (Fergusson et al., 2004). These are the suggested steps necessary to actually stop the school-to-prison pipeline.

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Appendix 1

Research Questions

1. The likelihood that HB 410 has decreased chronic absenteeism for public high schools in Ohio.
2. The likelihood that living in Appalachian Ohio is related to increased chronic absenteeism.

Appendix 2
Citi-Certification of IRB training



Completion Date 03-Dec-2019
Expiration Date 02-Dec-2022
Record ID 34426204

This is to certify that:

Kegan Bartlome

Has completed the following CITI Program course:

Social & Behavioral Research - Basic/Refresher (Curriculum Group)
Social & Behavioral Research - Basic/Refresher (Course Learner Group)
1 - Basic Course (Stage)

Under requirements set by:

Youngstown State University



Collaborative Institutional Training Initiative

Verify at www.citiprogram.org/verify/?w2a0dfc70-d61e-4d4a-9ee2-d30ad8ec71af-34426204

Appendix 3



One University Plaza, Youngstown, Ohio 44555
www.yzu.edu

July 9, 2020

Dr. Richard Rogers, Principal Investigator
Mr. Kegan Bartlome, Co-investigator
Department of Criminal Justice and Consumer Sciences
UNIVERSITY

RE: HSRC PROTOCOL NUMBER: 003-2021
TITLE: Ohio House Bill 410 Disrupts School-to-Prison Pipeline

Dear Dr. Rogers and Mr. Bartlome:

The Institutional Review Board has reviewed the abovementioned protocol and determined that it meets the expectations of DHHS 45 CFR 46.104(d)(4) and therefore is exempt from full committee review and oversight. Your project is approved.

Any changes in your research activity should be promptly reported to the Institutional Review Board and may not be initiated without IRB approval except where necessary to eliminate hazard to human subjects. Any unanticipated problems involving risks to subjects should also be promptly reported to the IRB.

The IRB would like to extend its best wishes to you in the conduct of this study.

Sincerely,

S. Van Slambrouck

Dr. Severine Van Slambrouck
Director Research Services, Compliance and Initiatives
Authorized Institutional Official

SVS:cc

c: Dr. John Hazy, Chair
Department of Criminal Justice and Consumer Sciences

