

SCHOOL CLIMATE AND EDUCATOR WELL-BEING IN KENTUCKY

Introduction

School climate has been connected to many important school and student-level outcomes: student achievement, teacher retention, and more (Papay & Kraft, 2017). However, our understanding of the extent to which school climate and educator well-being are connected is less robust. In this paper we explore the extent to which school climate predicts educators' perceptions of emotional well-being using the Impact KY survey from 2020. Using descriptive and regression models we find:

1. Educators answered less favorably about emotional well-being than school climate
2. School climate and emotional well-being are correlated
3. Climate, more than any other factor, predicts educator concern about emotional well-being
4. Climate matters more for educator well-being in low-performing schools than in high-performing schools

The Impact KY survey

The 2020 [Impact Kentucky Working Conditions Survey](#) was administered in all Kentucky schools between December 2019–February 2020. 43,089 educators responded to the survey (an 85% response rate). The survey asked 66 questions across nine domains including school climate, educator well-being, staff/leadership relations, school leadership, resources, professional learning, feedback and coaching, managing student behavior, and educating all students.

Responses have been aggregated to the school level for the analyses in the pages that follow. Data was collected from 1,399 schools. However, only schools with more than 10 responses were included in the data set, leaving 1,181 schools for this analysis.

Background

Defining School Climate

The National School Climate Center defines school climate as “The quality and character of school life. School climate is based on patterns of students’, parents’, and school personnel’s experience of school life and reflects norms, goals, values, interpersonal relationships, teaching and learning practices, and organizational structures.” To put it clearly, culture is what schools do, but climate is how you feel while it is happening.

School climate has been tied to many relevant outcomes in schools. A positive school climate increases teacher effectiveness, results in more protected learning time, supports a culture of school improvement, increases teacher satisfaction, and fosters a more professional environment that supports career longevity for teachers (Bryk et al., 2010; Moore Johnson et al., 2012; Papay & Kraft, 2014; Papay & Kraft, 2017).

On the Impact KY survey, school climate is measured as an average of nine questions (presented in Table 1). These items speak to the overall atmosphere of the school and the extent to which students and teachers feel positive and supported within the school. Overall, 64% of teachers responded favorably (indicated they agree or strongly agree) to the school climate questions. The lowest rated items were “on most days, how enthusiastic are the students about being at school?” (53%) and “how positive are the attitudes of your colleagues?” (56%). The highest rated items were “To what extent are teachers trusted to teach in the way they think is best?” (72%) and “how respectful are the relationships between teachers and students?” (71%). Table 1 shows the overall average across schools for all the school climate items.

Table 1. Average of School Climate Items (n=1,181 schools)

Question	Mean*
1 To what extent are teachers trusted to teach in the way they think is best?	72%
2 How optimistic are you that your school will improve in the future?	71%
3 How respectful are the relationships between teachers and students?	71%
4 How often do you see students helping each other without being prompted?	69%
5 Overall, how positive is the working environment at your school?	65%
6 How supportive are students in their interactions with each other?	61%
7 When new initiatives to improve teaching are presented at your school, how supportive are your colleagues?	59%
8 How positive are the attitudes of your colleagues?	56%
9 On most days, how enthusiastic are the students about being at school?	53%
CLIMATE OVERALL	64%

*Average percent of teachers at a school who responded favorably (strongly agree or agree) to the question

Defining Emotional Well-being for Educators

Often, well-being is discussed in terms of what it is not: stress, chronic health concerns, or burnout. However, focusing on what it means to have low well-being means that programs address the side effects rather than proactively building well-being (Cross, 2013). We define well-being among teachers as a wide-encompassing idea that includes teacher mental, physical, emotional, and spiritual health. Individual, school and community factors influence teacher well-being.

The International Labor Organization found that worker well-being is key in determining an organization’s effectiveness and productivity (Workplace Well-Being, 2021). In schools, educator well-being can manifest in several ways including feeling balanced, supported, recognized and encouraged to solve problems. Teachers with high levels of emotional well-being form closer relationships with their students, which is a factor in student learning and success in school (Roberts & Kim, 2010). There are also studies that show that emotional well-being is related to teacher retention - teachers who are not feeling supported in terms of well-being are more likely to leave the classroom (Harmsen, Helms-Lorenz, Maulana, & van Veen, 2018).

In the Impact KY survey, educator emotional well-being was operationalized with two questions, presented in Table 2. It is worth noting that these items leave room for interpretation from the respondent. Each respondent might define emotional well-being slightly differently. For one educator, emotional well-being might mean general stress levels while for another it might suggest high levels of anxiety or depression. However, the end of the question, “as a result of your work” helps bring alignment that, regardless of the interpretation, the responding educator should consider the source of the shift in well-being.

Table 2. Average Percent Concern About Emotional Well-Being (n=1,181)

Text	Mean
1 How concerned are you about your emotional well-being as a result of your work?	51%
2 How concerned are you about the emotional well-being of your colleagues as a result of their work?	59%
WELL-BEING OVERALL	56%

*Average percent of teachers at a school who responded extremely concerned, quite a bit concerned, or some concern to the question.

**Response options are 1= not at all, 2= a little, 3 = some, 4 = quite a bit, 5 = extremely

Overall, educators are quite concerned about emotional well-being. The majority of educators expressed concern over their own well-being as a result of their work. However, educators are, on average, more concerned about the well-being of their colleagues than their own well-being. For more information about the current state of educator well-being, read our first brief.

The Study

This study aims to explore the extent to which educators' perceptions of school climate predict educators' concern about emotional well-being. Using school-level averages of educators' responses to the Impact Kentucky survey, we use descriptive and regression analyses to address this question.

In the sections that follow we use three primary variables. Percent favorable for school climate references an average of the percent of teachers who answered "agree" or "strongly agree" (valued as a 4 or 5, respectively) with the nine school climate items presented in the above section.

Well-being is presented in two ways: concern about well-being and percent favorable about well-being. These measures are inverses of each other. For example, above we share that 51% of educators are **concerned** about their own well-being as a result of their work. The percent favorable reporting would share that 49% of educators responded **favorably** to this question. On the well-being scale, teachers were asked to rate their level of concern from 1 (not at all concerned) to 5 (extremely concerned). In this case, having no concern is the "favorable" response but it is the low value, numerically. Well-being favorability flips educators' responses to match the school climate orientation such that "not at all concerned" is a 5 and "extremely concerned" is valued at a 1. Those who answer a 4 or a 5 on the well-being items are considered to answer the question favorably while those who answer a 1, 2, or 3 are said to show concern.

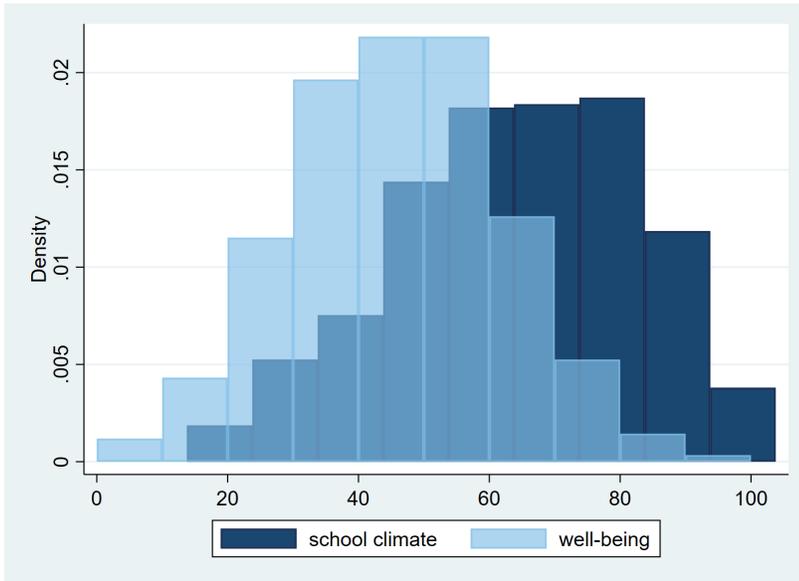
Key Findings

Finding #1: Educators answer less favorably about well-being than school climate.

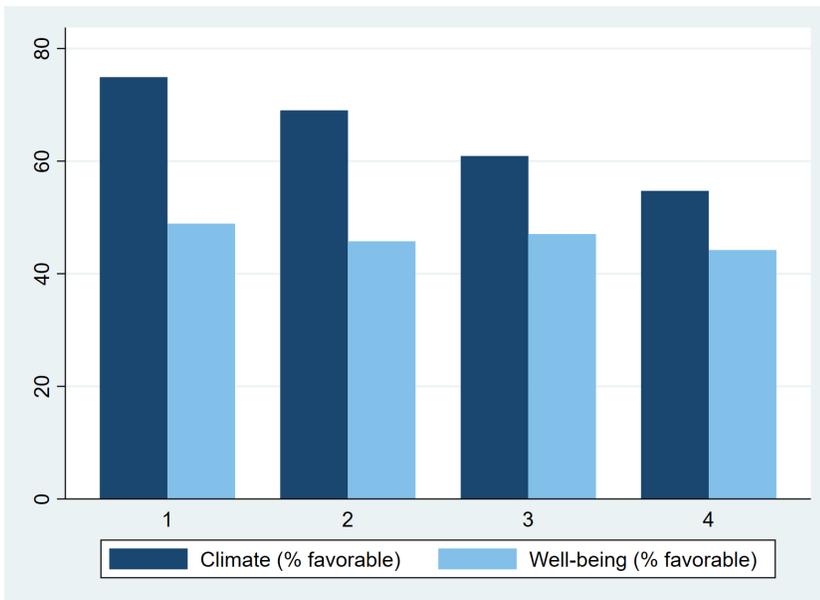
Data show that 64% of educators responded favorably to the climate items while only 45% of educators indicated that they were not concerned with their emotional well-being as a result of their jobs. Notice that, to simplify this analysis, we look at (a) the percent of educators who answered "favorably" about the items in the survey (i.e., educators who reported little or no concern over their emotional well-being or the emotional well-being of their colleagues); and (b) educators who responded positively about the climate in their schools. This allows for clearer interpretation.

The histogram below shows the distribution of how favorably schools responded to the well-being (in light blue) and school climate items (in dark blue). The school climate distribution is closer to 100% favorable than the well-being distribution, showing that educators responded more positively to the climate items.

Figure 1. Distribution of school climate and educator well-being favorability



In the school climate research, there is a consistent finding that climate varies by school grade level. The graph below shows that, while favorability for climate goes down as school level goes up, well-being remains consistent.

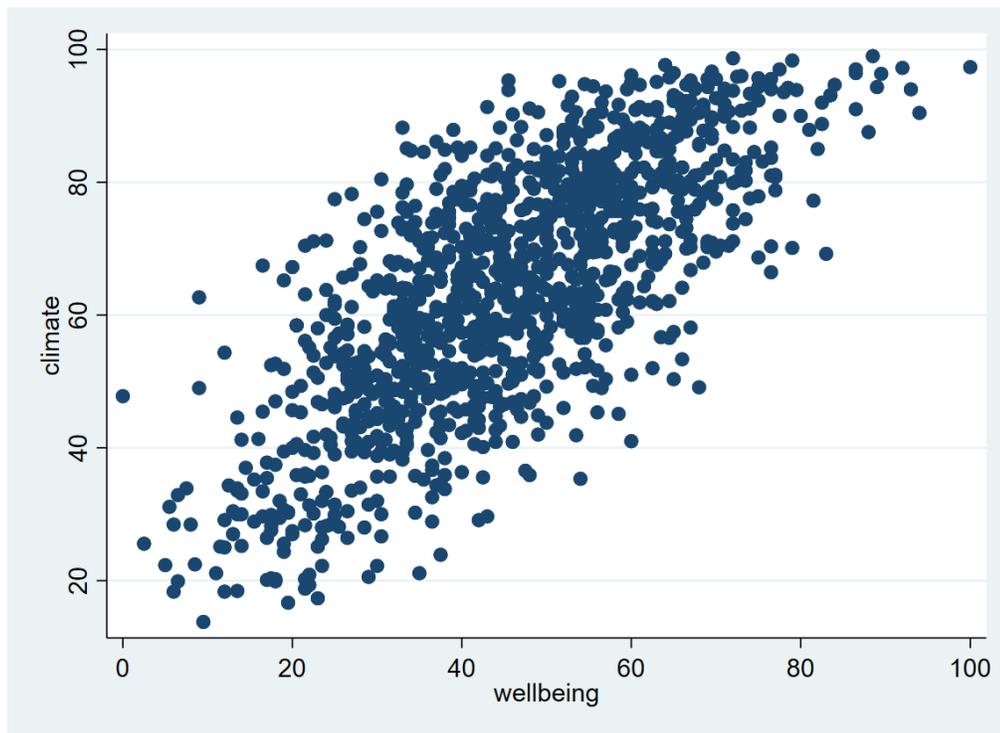


* 1 = early childhood centers, 2 = elementary schools, 3= middle schools, 4 = high schools

Finding #2: School Climate and Well-being Are Correlated

School climate and educator well-being are consistently correlated. The correlation coefficient between educator well-being and school climate is 0.74, a very high correlation. That is, at schools where educators respond to the survey more favorably about well-being, they also report a more positive school climate. The scatter plot in figure 3 shows the clear, linear relationship in the data.

Figure 3. School climate and educator emotional well-being favorability



This trend exists across school levels. While school climate gets lower as school level goes up (as shown in figure 2), the correlation between school climate and educator well-being remains consistently high across school levels, ranging from 0.71 to 0.80 depending on the school level.

Table 3. Correlations between school climate and educator well-being by school level

Level	Correlation
Early Childhood Center	0.71
Elementary School	0.77
Middle School	0.80
High School	0.73
OVERALL CORRELATION	0.74

Finding #3: Climate, more than any other factor, predicts educator well-being

While school climate and educator well-being are clearly related, additional testing was needed to understand the extent to which shifts in responses about school climate *caused* shifts in responses about educator well-being. Using regression analysis revealed that school climate was a statistically significant predictor of educator well-being across a variety of models. The table below summarizes four key models, all of which use district level fixed effects to account for within-district variation. Model 1 shows the bi-variate relationship between school climate and educator concern about well-being. Model 2 includes a series of school-level factors such as the number of students in a school, the teacher turnover for 2019 at that school, the percent of students enrolled in English Learner services or special education services, the percent of students who receive free/reduced price lunch, student racial demographics, and the percent of students proficient on the math and reading end of year assessments. Model 3 includes educators’ responses to the other questions on the Impact Kentucky Survey for that school but not school factors. Model 4 combines Models 2 and 3 and includes both school level factors and survey responses.

Across all four models, school climate is a significant predictor of educator concern about emotional well-being. That is, as educators’ perception of school climate improves, educators’ concern about emotional well-being decreases. The R-squared shows that these models explain a great deal of the variation in educators’ concern about well-being. The simple, bivariate model explains more than 50% of the variability, and the more robust, fourth model explains 67.6% of the variability in educator concern about emotional well-being. As you add in other covariates, however, the effect size of school climate decreases. This is likely because some of

the variability in educator well-being was actually due to variation in other variables that had not yet been included in the model.

Table 4 shows a summary of the results and a full table is available as an appendix. In model 4 we include school level factors, district level fixed effects, and each of the Impact KY survey scales. This model matches our theoretical expectations for predicting emotional well-being and has the best predictive power and fit, statistically. In this model, a one standard deviation increase in school climate leads to a corresponding 45% decrease in educator concern about emotional well-being ($p < 0.01$).

Table 4. Regression estimates for educator well-being

VARIABLES	(1) Well-being concern	(2) Well-being concern	(3) Well-being concern	(4) Well-being concern
School climate	-0.74*** (-0.02)	-0.70*** (-0.02)	-0.38*** (-0.05)	-0.45*** (-0.06)
Vector of school-level factors	No	Yes	No	Yes
Impact KY Survey Scales	No	No	Yes	Yes
District-level fixed effects	Yes	Yes	Yes	Yes
Constant	0.00 (-0.02)	0.16*** (-0.05)	-0.00 (-0.03)	0.17*** (-0.05)
Observations	1,180	1,172	1,180	1,098
R-squared	0.55	0.61	0.65	0.68

Robust standard errors in parentheses

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Finding #4: Climate matters even more for educator well-being in low-performing schools than in high-performing schools

To make the connection to student outcomes we examined the differences in the relationship between climate and well-being among high performing schools and low performing schools.

To do this, we defined “high performing schools” as those schools in the top 25% of performers statewide, in terms of the average percent of students who were proficient on math and reading end of year assessments. Conversely, “low performing schools” are those schools in the bottom 25% of performers statewide.

Results suggest that school climate remains a significant predictor of educator well-being for both high and low performing schools. However, the effect size for low-performing schools is greater than for high-performing schools. That is, a one standard deviation increase in school climate among low performing schools led to a 55.4% standard deviation decrease in educators’ concern about emotional well-being. Among high performing schools, a one standard deviation increase in school climate corresponds with a 31.4% standard deviation decrease in educators’ concern about emotional well-being.

Table 5. Regression estimates by school performance levels

VARIABLES	(1)	(2)
	Well-being concern	Well-being concern
Group	Low performing schools	High performing schools
School Climate	-0.55*** (0.09)	-0.32*** (0.09)
School level factors?	Yes	Yes
Impact KY Survey?	Yes	Yes
Observations	274	348
R-squared	0.78	0.61

Robust standard errors in parentheses

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Strategies and Approaches to Consider

School climate is an important factor in predicting educator well-being. The research shows that district and school leadership are critical in improving school climate and should consider

using the strategies listed below to improve school climate, thereby improving educator well-being among other important outcomes.

Some **strategies** for improving school climate include:

At the school level:

- **Assess Current School Climate and Identify Priorities:** Diagnosing the current state of school climate is key to driving improvement efforts. There are many instruments for doing this, including the [Yale School Climate Walkthrough](#), and the [School Climate Surveys](#) in the [wealth of guides and training tools](#) from the U.S. Department of Education. In Kentucky, district and school leaders can utilize the [Impact Kentucky Survey](#) results to assess specific areas of climate and educator well-being in need of prioritization. Leaders and teachers can also use the [Student Thriving Index](#) within Infinite Campus to help identify areas of student well-being in need of targeted, intentional support.
- **Implement intentional and strategic practices to cultivate connection and positive relationships between people in schools.** One powerful evidence based tool is called the [Compassion Resilience Toolkit](#). This free, well-designed toolkit was co-created by education practitioners and researchers who study well-being. The purpose is to support building of resilience for educators and minimizing compassion fatigue in an overstressed system. Another unique tool is [COR Classrooms](#), a suite of online learning modules focused on building positive relationships with students. The COR model addresses the essential pieces of a relationship and how they work together. Understanding this model empowers teachers to pay close attention to the different factors influencing their relationships, which in turn will help them form stronger and more positive connections with students.
- **Incorporate a Trauma Responsive Approach for Students and Staff:** We are increasingly understanding the effects of trauma on student learning, behavior, and school climate. In Kentucky, the [School Safety and Resiliency Act](#) requires that districts and schools have a trauma informed plan to support students who experience trauma and the teachers who experience secondary traumatic stress while supporting them. When adults in school buildings are trained in utilizing trauma responsive practices, they are better able to recognize the signs and symptoms of trauma, respond appropriately, and connect them with the resources needed. This approach makes schools feel more human-centered, supportive, and safe for kids and staff - all of which will drive improvements in school culture. To build your school's capacity for trauma responsiveness you can access information about [Kentucky district and school trauma](#)

[informed plans and the trauma toolkit](#), as well as request training for your staff. Additionally, the [Trauma Responsive Educator Project](#) offers a wide range of very practical and user friendly tools and resources for supporting a trauma responsive approach.

- **Integration of Social and Emotional Learning (SEL):** School climate is inextricably linked with social and emotional learning. As school climate improves, students and adults alike increase their social and emotional capacities, and a positive school climate creates the conditions conducive for social and emotional learning (Darling-Hammond, 2018). The Collaborative for Academic, Social, and Emotional Learning (CASEL) offers [a rich array of free resources on ways to implement SEL](#) at every level of the education system, and the [KDE Social, Emotional and Behavioral Learning/Health page](#) has a wealth of resources. While implementing a systems approach to this work is key, even small kernels of practice can be beneficial for individuals. For quick strategies, you can also access this [bank of SEL activities](#) from *InspireEd* to support student SEL development, and this [adult SEL toolkit](#) and this [bank of evidence based practices](#) for supporting educator well-being and SEL.

District Level Strategies:

- **District Level Efforts to Support Positive Climate:** From a systems perspective, districts play a critical role in prioritizing, resourcing and supporting school climate in schools. Consider this [School Climate Improvement Toolkit](#) (Caskey, 2016) that was developed to be used by district level teams to ultimately identify high leverage activities towards improving school climate system-wide. In addition to using data to assess school climate to target specific supports for specific schools, district personnel would benefit from intentionally spending time regularly “on the ground” in schools to ensure that efforts are collaborative and informed by what is actually happening. Importantly, it is not about mandating and monitoring, but instead about connection and relevant support. Regardless of initiatives that are implemented, being intentional about structuring them so that people and relationships are put first is key.
- **Supporting a Tiered Systems Approach in schools, with an emphasis on a healthy culture and positive climate as critical to Tier 1.** By now, most school systems have adopted to some degree a multi-tiered approach to supporting safe schools and positive student behavior, such as Positive Behavior Interventions and Supports (PBIS) and Multi-tiered Systems of Support (MTSS). However, so much attention and support is spent on “putting out fires” at tiers 2 and 3, that often addressing Tier 1 substantively becomes very difficult. Ensure a strong foundation by supporting solid Tier 1 systems and norms in schools. For information about this support in Kentucky check out the [PBIS](#) and [MTSS](#) resources.

- **Explore practice and policy changes that support the whole person:** District leaders should consider adopting a whole child approach to teaching and learning. This type of approach improves the safety and security of learners as humans, thereby improving school culture and the well-being of teachers and staff school wide. A first step to implementing this type of approach is to build your own knowledge and capacity of whole child policies [by reading this paper from the Learning Policy Institute](#).

The findings presented in this paper suggest that improving school climate is one way to improve educator emotional well-being. School and district leaders should think critically about the current state of their own school culture and the emotional well-being of their staff. Then, leaders should take this reflection to determine the highest leverage strategy to improve their school's culture and the emotional well-being of their educators.

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