Outcomes of a School-Wide Social-Emotional Learning and Character Development Initiative in an Urban Middle School

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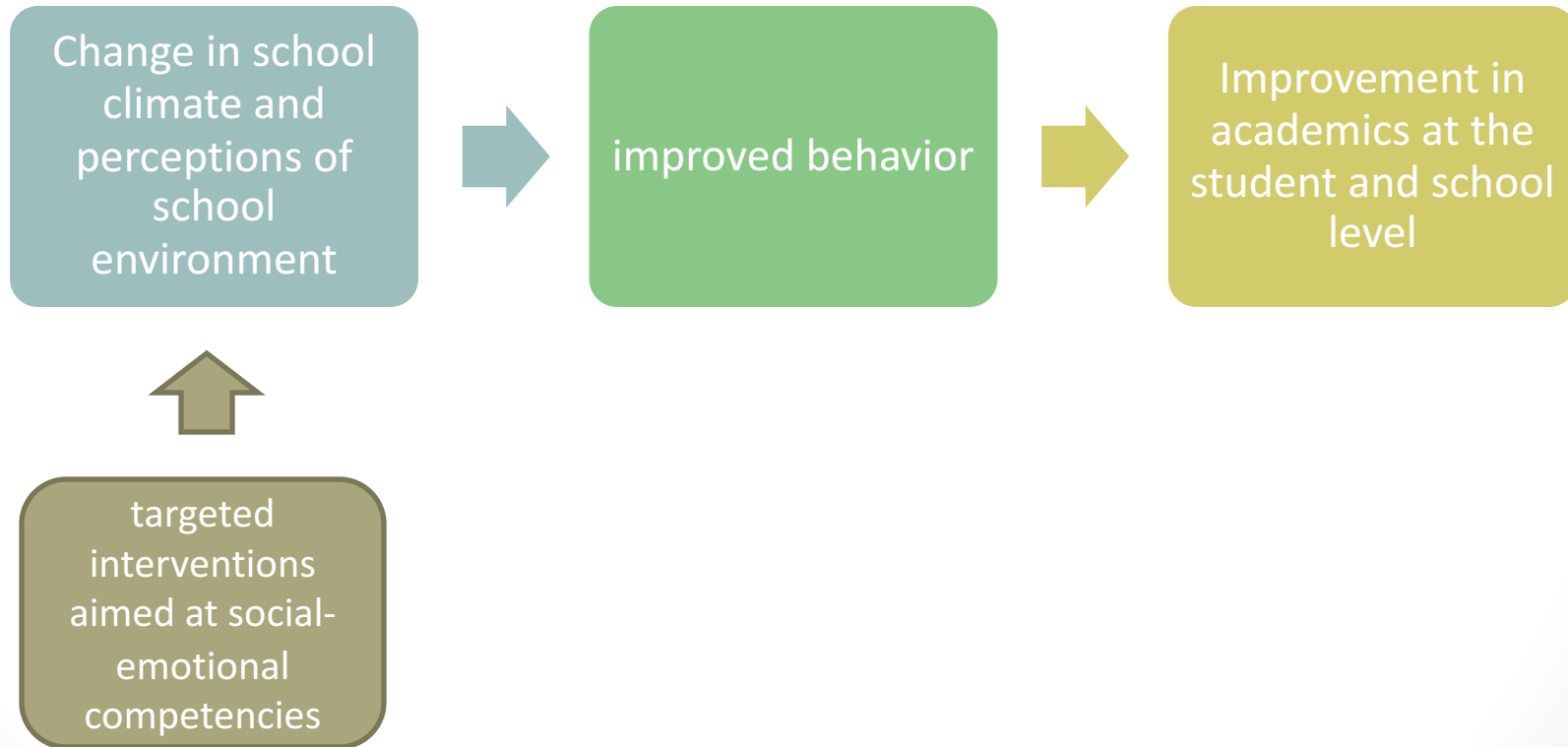Danielle Hatchimonji, M.S.
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Theorized "School of Character" Intervention Model

- Improvement to the school as a whole should be begun through a positive shift in school culture and climate (Loukas & Murphy, 2007; Roeser & Eccles, 1998)

- With targeted interventions aimed at students' acquiring the social-emotional competencies needed for effective participation in classroom learning and school life.

- Positive changes in skills and attitudes should result in improved behavior with fewer discipline referrals (Osher et al., 2010; Spaulding et al., 2010).

- As result of these changes, it was proposed that academic improvement would be seen at the student and school level.

The theory driving the intervention

Change in school climate and perceptions of school environment → improved behavior → Improvement in academics at the student and school level

targeted interventions aimed at social-emotional competencies

The intervention

- Data for this project were drawn from a 3 year school improvement initiative begun in the 2012-2013 school year that assessed school climate and indicators of the school's functioning in an urban middle school in New Jersey.

- At the beginning of the study, the district had one of the lowest graduation rates in the state (under 60%) and reading and math testing scores below the 15th percentile in the state.

- This urban middle school generally reflected a student population of approximately 1300-1400 students, grades 6 through 8.

- Students were majority Latino/Hispanic and of lower socio-economic status (receiving free or reduced lunch).

The intervention

- The three-year SECD "School of Character" model engaged a whole-school intervention program, including several initiatives to impact all students and staff in the school:
  - Biannual school climate evaluations and feedback
  - A school of character committee to oversee SECD, culture and climate initiatives
  - A Life, College, and Career Advisory (LCCA) Program
    - an SECD curriculum and structured advisory program to teach all students social-emotional and character development toward the goal of preparing them for the challenges of everyday life, college, and career paths
- The methodology of the project followed community-based participatory action research guidelines.

The data

- **Student demographics**
- **Discipline referrals**
- **Academic achievement**
- **Climate/School environment data** were collected from all students during the Fall and Spring
  - the exception was the Fall of the 2014-2015 school year when this climate/environment data were only collected for 6th graders.
  - **School climate**
  - **Bullying**
  - **Social Normative Expectations**

Demographics by year of intervention

|		YEAR 1		YEAR 2		YEAR 3	
		N	%	N	%	N	%
Grade	6th	511	38.3	509	35.7	526	36.3
	7th	444	33.3	481	33.7	470	32.4
	8th	378	28.4	437	30.6	454	31.3
Gender	Male	682	51.2	739	51.8	736	50.8
	Female	651	48.8	688	48.2	714	49.2
Lunch status	Free/reduced	1243	96.2	1346	94.3	1337	92.2
	Full price	90	3.8	81	5.7	113	7.8
LEP	No LEP	1200	90.0	1251	87.7	1236	85.2
	Has LEP	133	10.0	176	12.3	214	14.8
IEP	No IEP	1136	85.2	1236	86.6	1227	84.6
	Has IEP	197	14.8	191	13.4	223	15.4
Ethnicity	Not Hispanic	165	12.4	160	10.2	154	10.6
	Hispanic	1168	87.6	1267	88.8	1296	89.4
Total		**1333**		**1427**		**1450**	

The data

We tested

- 1) the hypothesized pathway model whereby student perception of school environment (climate, bullying and social normative expectations) predicted discipline referrals, which in turn predicted final grade in all three years of intervention

- 2) observed the school-level changes that occurred over the course of the 3 year intervention.

# Testing Theorized "School of Character" Intervention Model
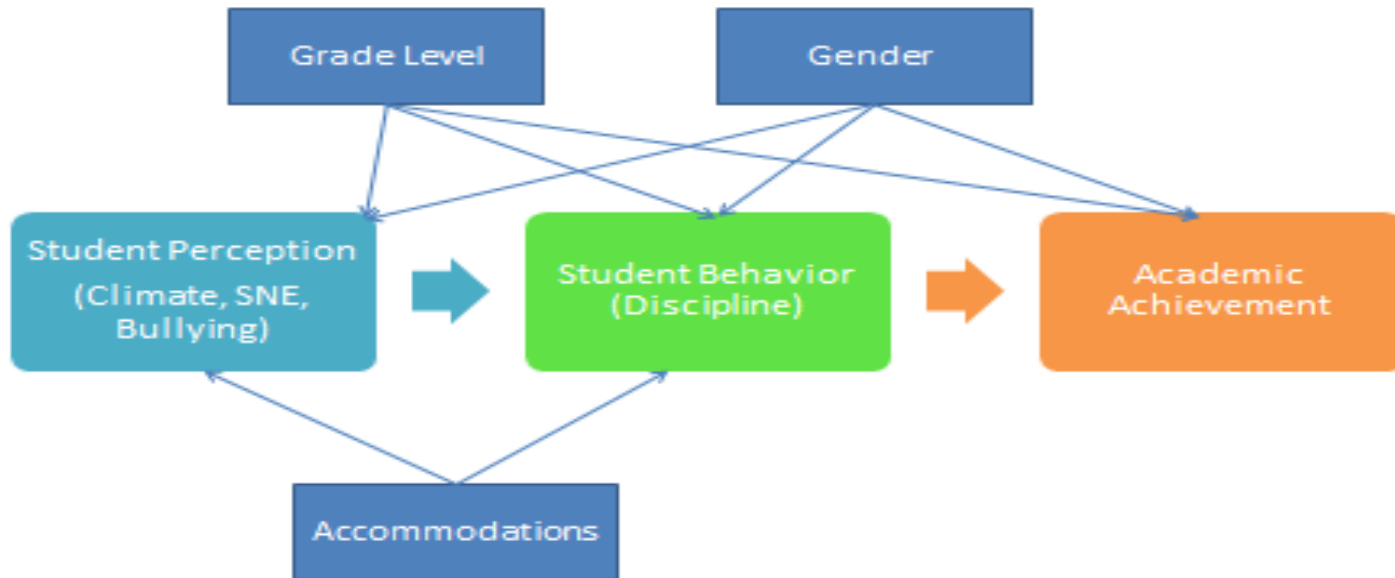
Findings

- The three-year SECD "School of Character" model engaged a whole-school intervention program

- These results suggest that the overall hypothesized model holds true during each year of the intervention, namely that student perception predicts student behavior, which impacts student achievement.

- At the school level, there was also qualitative evidence to suggest overall organizational change.

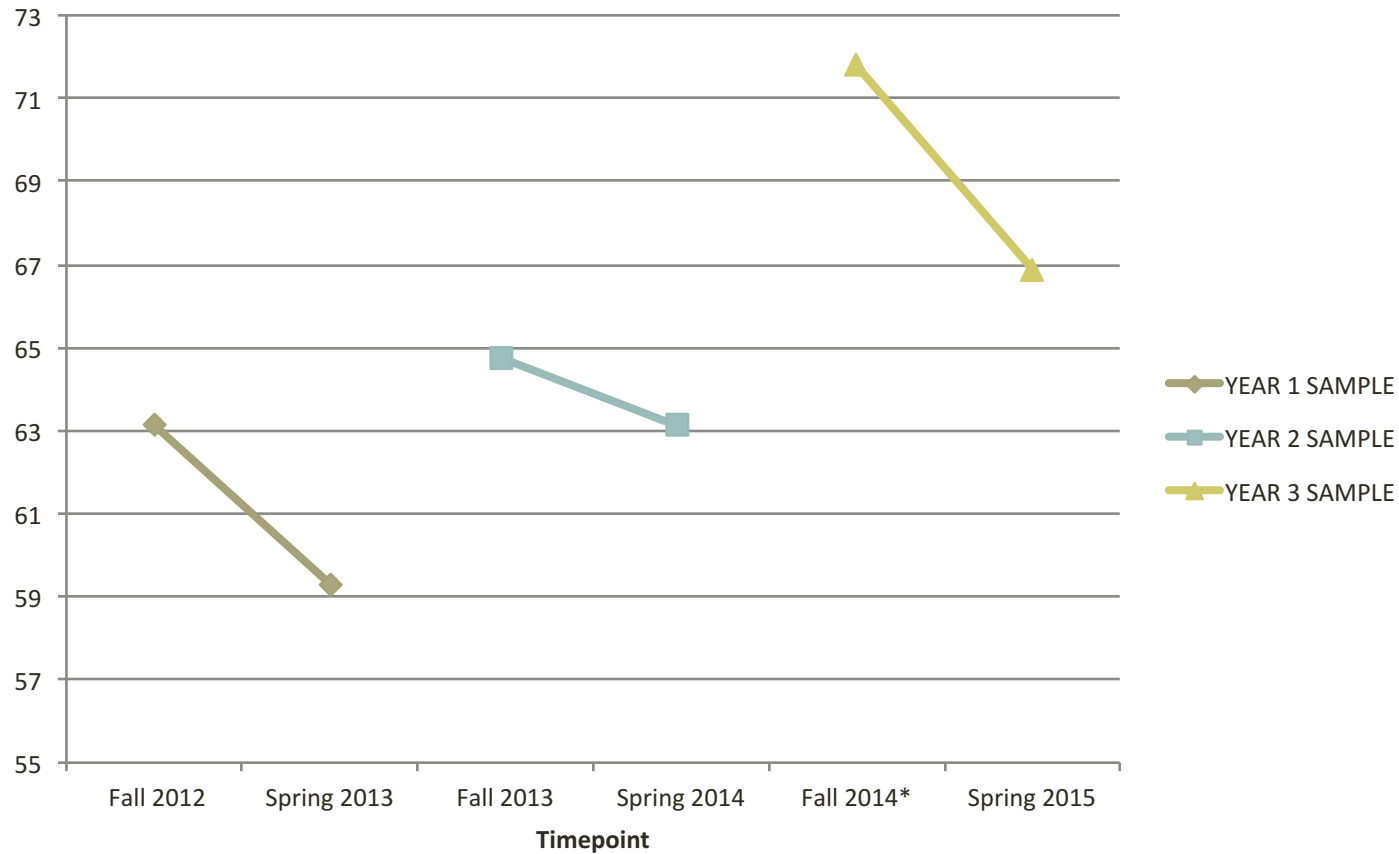# Results: Grade data by year of intervention
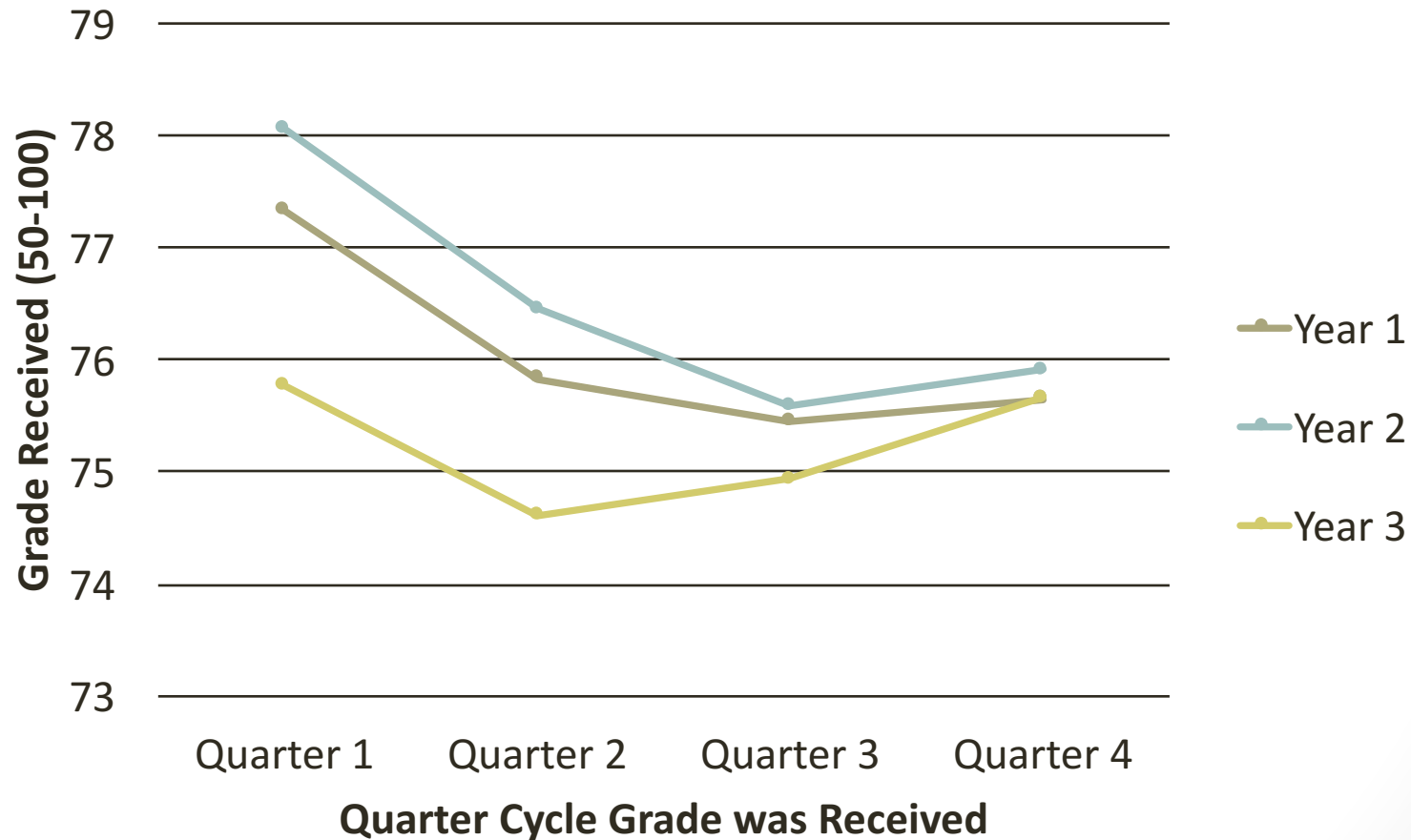
Results: Student perceptions of school climate by year of intervention
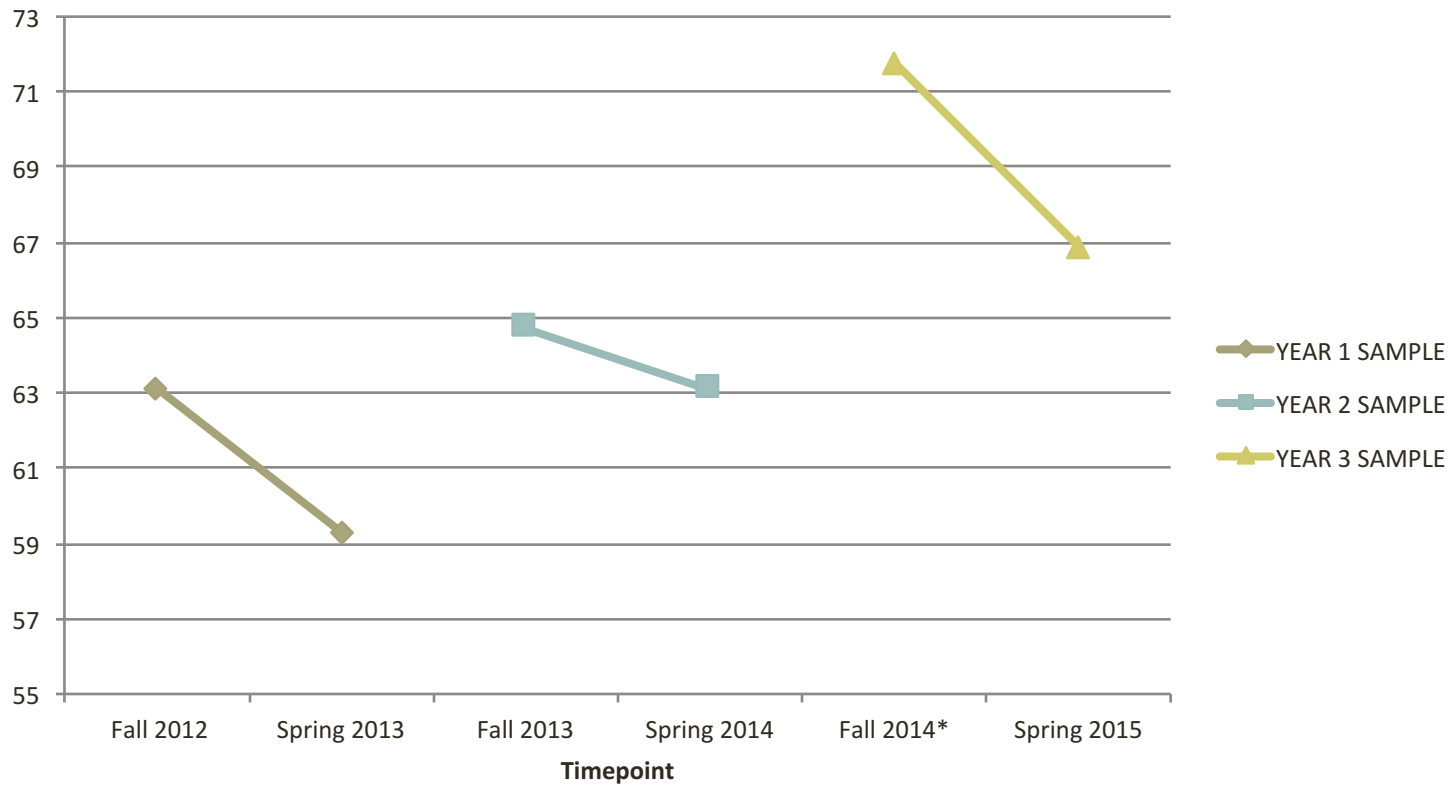
*Only 6th graders were assessed in the Fall of 2014

Results: Student perceptions of social-normative expectations by year of intervention

*Only 6th graders were assessed in the Fall of 2014

Results: Student perceptions of bullying* by year of intervention

*higher numbers translate to a more positive view

*Only 6th graders were assessed in the Fall of 2014

Discussion

- The 'big-picture' descriptive review of the school environment helps illuminate the complex impact of an intervention driven by the logic model tested.

- Evidence from the current study suggests that there was a natural decline in academic achievement for all students over the course of each year and middle school as a whole.

  - There is some data to support this finding as an overall academic trend, specifically that student academic achievement progress is not linear, and is particularly at-risk during middle school (Shanley, 2016) and is contingent on internal student factors such as motivation and other social-emotional factors (Otis, Grouzet, & Pelletier, 2005; Roeser & Eccles, 1998).

Discussion

- Interventions exist within an influential and ever-changing external ecology and sometimes are effective because they make downward trends less negative, or provide a different environment into which new students enter and students, who might otherwise leave, choose to stay.

- This is especially true for persistently challenged schools, which often fall under state-level constraints and have their academic practices scrutinized and changed according to shifting educational whims.

- These pressures lead many such schools to feel beaten down by the end of the school year, even after beginning the year with some enthusiasm and hope.

- Interventions operating in such circumstances need to be understood in context-sensitive and developmental ways.

Write down three take-aways on one index card.

Supplementary Materials

The data: Path Analysis

- All control and predictor variables were entered into the sample model and path analysis was used to test a "structural model" (Cohen et al., 2013).

- For all models, the continuous predictor variables were centered to reduce multicollinearity.

- Good fitting models generally have non-significant chi-square values, TLI at or above .90, CFI at or above .95, and RMSEA at or below .06.

- Parameters were established as statistically significant with alpha < .05.

- All preliminary analyses were conducted using SPSS software, version 21 (IBM Corporation, 2012) and the modeling analyses was conducted with AMOS software (Arbuckle, 2006).

Testing Theorized "School of Character" Intervention Model

- Across all 3 years of the intervention the hypothesized model resulted in a significant chi-square but an overall adequate fit via other measures of fit.
  - Example for Year 1:
  - School climate showed a significant chi-square ($\chi^2(5) = 17.71$, $p = .003$), but other measures of model fit indicate an adequate fit to the data *CFI* = .977, *NFI* = .969, *RMSEA* = .044, 90% CI [.023, .067], *AIC* = 61.71.
  - Social-normative expectations found a significant chi-square ($\chi^2(5) = 49.32$, $p<.001$, but other measures of model fit indicate an adequate fit to the data (*CFI* = .926, *NFI* = .921, *RMSEA* = .082, 90% CI [.062, .103], *AIC* = 93.32
  - Perceptions of bullying found a significant chi-square ($\chi^2(5) = 15.34$, $p=.009$ respectively) but other measures of model fit indicate an adequate fit to the data (and *CFI* = .980, *NFI* = .971, *RMSEA* = .039, 90% CI [.018, .063], *AIC* = 59.34 respectively).
- Note, that for large sample sizes, the chi-square statistic provides a highly sensitive statistical test, but not a practical test, of model fit (Cheung & Rensvold, 2002).
- These findings suggest that the logic model behind the School of Character Intervention broadly held true, with a significant pathway between student perceptions of their environment, student behaviors and student academic achievement identified.
- In contrast, the change model did not appear to be significant.

Academic grade trends comparing grade level across time