



CHANGES IN EDUCATIONAL PROFILES OVER TIME

Jeffrey A. Anderson, Ph.D., Eric R. Wright, Ph.D., & Harold E. Kooreman, M.A.

Introduction

While systems of care have been associated with improved outcomes for youth and families in a variety of domains, little empirical information about how these approaches impact school functioning has been published. The purpose of this report is to describe the educational profiles of students served in the Dawn Project and the pattern of change in educational profiles over time.

Methods

Data for this study were gathered from interviews with caregivers and youth who were enrolled in the Dawn Project as part of the national evaluation. Caregiver interviews for this evaluation are conducted at enrollment and at 6-month intervals, up to and beyond 24 months. Specific data for this study were drawn from a subset of interview questions that asked caregivers to rate students' educational functioning during the past six months.

The outcome variables in this study were derived by combining several items from the Educational Questionnaire (EQ), a 21-item scale developed by ORC Macro (2000) as part of the protocol for the national evaluation. The items on the EQ ask caregivers to rate their child's educational status and school performance during the previous 6 months. The three outcome variables used for this study, attendance, grades, and discipline, were categorized into one of three values: below average functioning, average functioning, and above average functioning, as described below.

Attendance. Students were considered to have below average attendance if they were rated by their caregivers as having attended school less than 50% of all possible school days. A student received a rating of average attendance if the caregiver rating indicated that attendance was up to 75% of all possible school days. Caregiver ratings of either missing no school or attending school more than 75% of the time were considered to be above average attendance.

Grades. This variable was based on caregiver ratings of a student's average grades in school. This variable was considered below average if student grades were rated as being typically D's or F's, or if their performance was rated as being either unsatisfactory or needing improvement. Students rated by their caregivers as having typically C's and/or performing satisfactorily were considered to have average grades, while grades were categorized as above average when caregivers rated achievement as typically A's or B's.

Discipline. Discipline levels were based on the number of detentions, suspensions, or expulsions, as rated by caregivers. A student who had received out-of-school suspension or expulsion was considered to have below average discipline, where as a student who only received in-school detentions was considered to have average discipline. Students who had received no detentions, suspensions, or expulsions were rated as above average discipline.

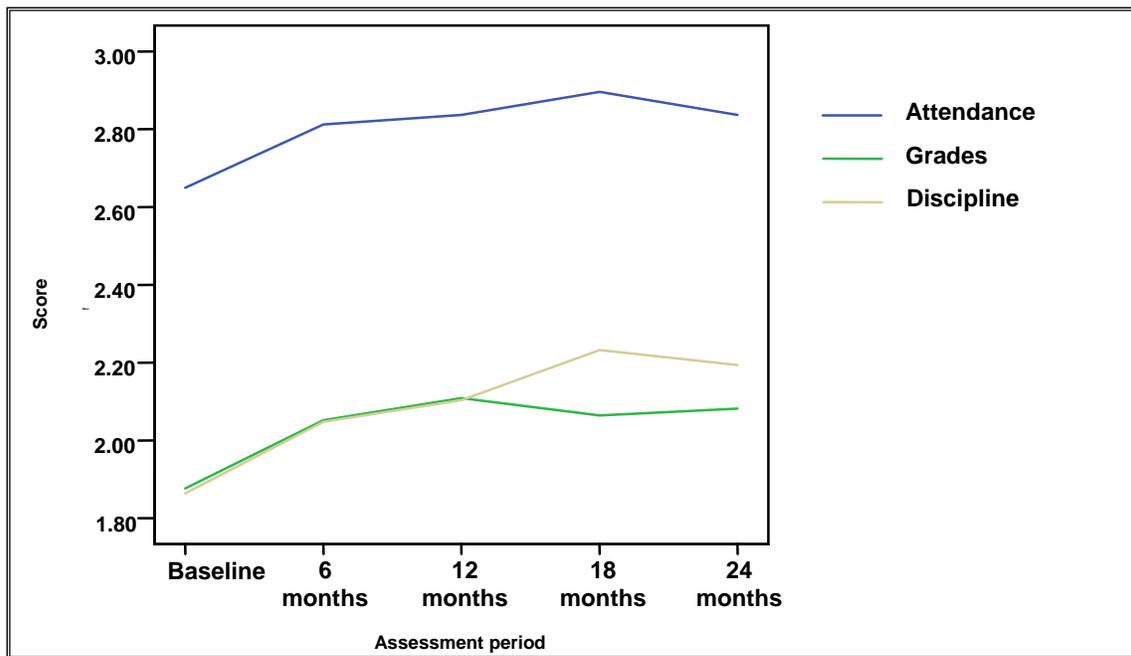
Predictor Variables. The predictor variables for this study included referral source, demographic information (age at enrollment, gender, race), whether or not a child was receiving special education services, and the amount of special education services received (1 = 0-25% of the school day; 2 = 25-50% of the day; 3 = 50-75%; 4 = 75-100%; 5 = “Other”).

Analysis. Longitudinal analyses were conducted with hierarchical linear modeling (HLM; Raudenbush & Bryk, 2002), which was used other methods specifically because HLM allows for analyses when cases may have missing data at one or more time points.

Results¹

Table 1 presents the scores over time in terms of caregiver’s perceptions of grades, attendance, and discipline for the young people participating in the Dawn Project (Figure 1 presents the same information in graphical form). HLM results suggest that changes over time in grades, attendance, and discipline improve are statistically significant, suggesting that improvement is occurring for each variable.

Figure 1. Average scores for grades, attendance, and discipline over time.



¹ Additional information is available in the “Educational Profiles at Enrollment for Young People in the Dawn Project” briefing.

Table 1. Average scores for grades, attendance, and discipline over time.

	Intake	6 months	12 months	18 months	24 months	Overall
	<i>M (SD)</i>					
Grades	1.86 (0.79)	2.04 (0.80)	2.12 (0.77)	2.06 (0.78)	2.09 (0.77)	2.01 (0.79)
Attendance	2.66 (0.64)	2.82 (0.48)	2.83 (0.48)	2.91 (0.36)	2.85 (0.43)	2.78 (0.53)
Discipline	1.88 (0.87)	2.05 (0.91)	2.10 (0.89)	2.22 (0.89)	2.19 (0.91)	2.04 (0.90)

Note. 3 = above average; 2 = average; 1 = below average.

Follow up t-tests demonstrate that when compared to baseline scores, improvement in attendance is significant over time, including 6 months ($t = 2.81, p < .01$); 12 months ($t = 2.05, p < .05$); 18 months ($t = 4.01, p < .001$); and 24 months ($t = 3.56, p < .01$). When compared to baseline scores, improvement in grades is significant over time at 6 months ($t = 3.76, p < .001$); 12 months ($t = 2.72, p < .01$); and 24 months ($t = 2.09, p < .05$). However, grades at 18 months were not statistically significantly different than compared to baseline. For discipline, when compared to baseline scores, improvement is significant over time, including 6 months ($t = 2.90, p < .01$); 12 months ($t = 2.42, p < .05$); 18 months ($t = 2.76, p < .01$); and 24 months ($t = 2.21, p < .05$).

HLM was also used to test the impact that the variables of interest (referral source, demographics, and special education) have on change over time in educational functioning. Being referred from child welfare was associated with a slower rate of improvement in attendance over time (compared to all other referral sources; see Figure 2), while being a female was associated with a faster rate of improvement in attendance over time (see Figure 3). For grades, being from a minority background was associated with having higher grades at the time of enrollment in the Dawn Project (see Figure 4). For discipline, none of the variables were significant, suggesting a universal pattern (i.e., no differences across characteristics) for children and youth in terms of academic grades.

Figure 2. Change in ratings of attendance over time for youth referred by Child Welfare as compared to all other referral sources.

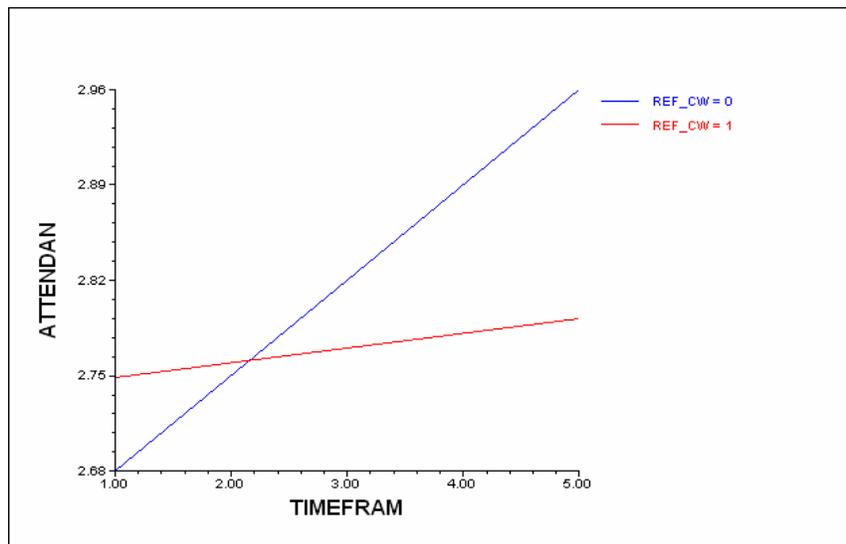


Figure 3. Change in ratings of attendance over time by gender.

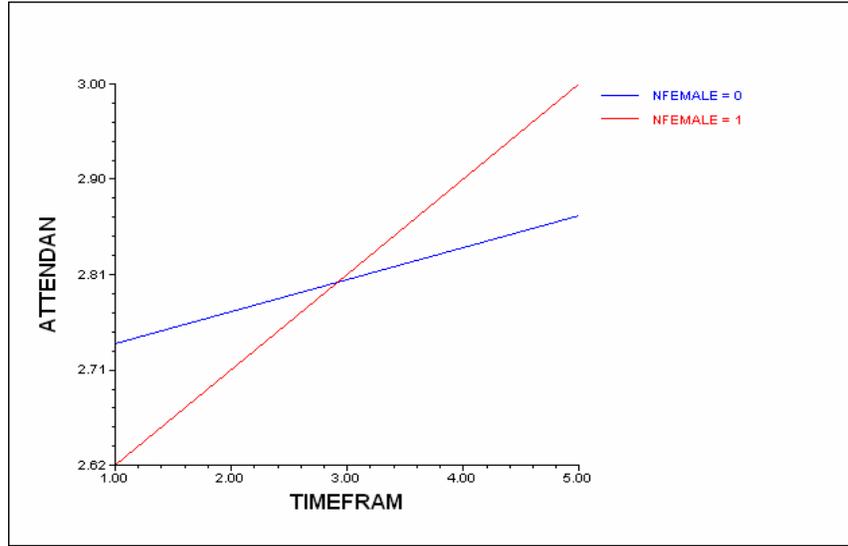
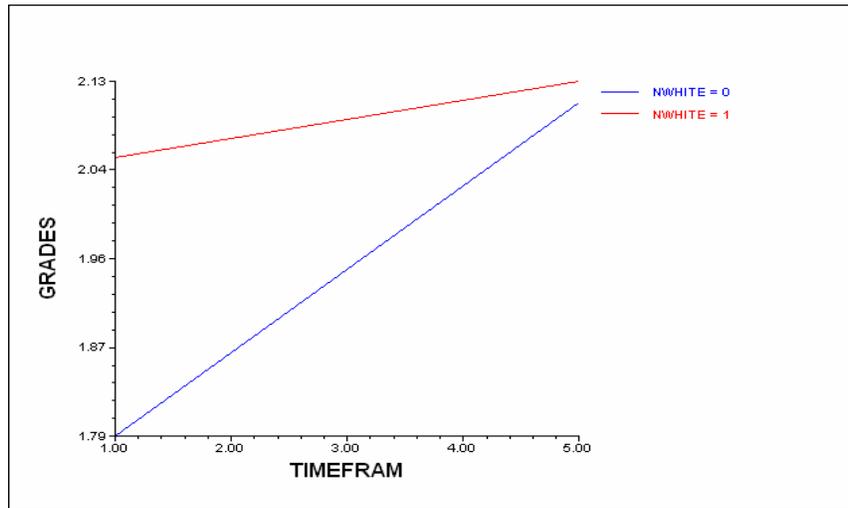


Figure 4. Change in ratings of grades over time by race.



Conclusions

This study found that participation in the Dawn Project is associated with improvements in the educational outcomes of the children and youth who participate. Indeed, it is encouraging that improvement over time was seen in attendance, grades, and discipline. However, the findings from this exploratory study need to be interpreted with some caution. First, caregivers' self-report of the child's school functioning is limited to respondent perceptions. Using a single measure of school functioning based on second party self-report may fail to capture the depth or breadth of the school characteristics of interest in this study. Second, attendance data are skewed, as the interview questions about attendance may not adequately capture a range of attendance that would fully discriminate among respondents.

In conclusion, we speculate that there may be an underlying model in the Dawn Project model that is worth considering. Because schools play such a central role in the lives of students, an early focus of the Dawn Project child and family team is often consistent attendance at school. We speculate that once attendance is stabilized, child and family teams work with schools to help students engage in school-appropriate behavior. Prior research suggests that students with serious emotional and behavioral challenges often are excluded from instructional time, especially when behavioral problems are not alleviated in the classroom. In fact, in this study, almost half of students had been suspended from school during the past six months. Therefore, we cannot overstate the importance of supporting students (as well as their teachers and other school personnel) to stay in school. Indeed, when attendance and appropriate behavior are stable, we may be able to expect improvements in academic achievement.

References

- ORC Macro (2000). *Data Manual for Phase III of the National CMHS Evaluation*. Atlanta, GA.
- Raudenbush, S. W., & Bryk, A. S. (2002). *Hierarchical Linear Models: Applications and Data Analysis Methods* (2nd ed.). Thousand Oaks, CA: Sage Publications, Inc.