

**THE EFFECTIVENESS OF INTERVENTION PROGRAMS AMONG
PUPILS AT RISK:
THE CASE OF "EVERY STUDENT ACHIEVES EXCELLENCY"
INTERVENTION PROGRAM**

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***Abstract:** This article is part from a wider and more complex study conducted in order to examine at-risk middle school Arab students and the intervention programs that can be used to improve their school engagement while facilitating transition successfully into adulthood. Part of this study was suggesting a new intervention program for pupils at risk in the Arab sector in Israel. The new intervention program based on Every Student Achieves Excellency specifically focused on Arab middle and high school students. Through the proposed intervention program, at-risk students stand a chance to achieve better academic performance and school engagement since it focuses on main challenges which are not addressed in the traditional Jewish-based intervention programs. In conclusion, the new intervention program should be applied to at-risk on Arab middle and high school students in Israel to better cultivate their academic potential and help inform better future career prospects.*

***Key words:** intervention program, school engagement, Pupils at Risk*

Introduction

Intervention programs have been noted to be central in mitigating against potential negative impacts for youths at risk. As applies to this study, an at-risk-youth refers to the adolescents and teenagers that are less likely to transition into adulthood successfully (Aikens & Barbarin, 2008). Success, in this case, is defined as the ability to achieve academic success, avoid crime, acquire relevant job skills, join the labor market, and become independent (Brewin, Andrews, & Valentine, 2000). The focus of this study was to investigate the impact of intervention programs for youth at risk, and especially with consideration on the middle and high school Arab students in Israel.

Brookmeyer, Henrich, and Schwab-Stone (2005) noted that youths at risk of poor academic performance and early school dropout are often exposed to a slow and gradual that influences their final decision to drop from school. Shahrar, G., & Henrich, (2015) noted that lack of engagement is one of the primary variables that catalyzes long-term students' decisions to drop from school and engage in unproductive activities that make it difficult for them to transition into adulthood. Ben-Rabi and his colleagues (2012) have linked student engagement at school, academic performance, and successful transition into adulthood with improved intervention programs. Brunstein-Klomek, and his colleagues (2007) have also associated intervention programs to positive behavior at school and as a robust predictor of achievement.

The research interest on this topic was informed by the researchers' past experience as a teacher while working with at-risk students. As a teacher in a middle school for more than 15 years, the researcher has noticed a rise in the number of youths categorized as being at risk. Each year, the researcher and other teachers have encountered students in classrooms who require additional time, support, and motivation to be successful. Educators have categorized this group of students as

being at-risk. Due to the fact that providing safe and supportive learning environment is essential for the success of the educational role, and because there are many aspects to achieve environments in which young students feel safe, involved, appreciated, and responsible for their behavior and learning. Therefore, school intervention programs for youth at risk are essential to the whole community. Specifically, the intervention programs aim to eliminate existing problems, prevent the development of new problems, develop better peer relationships at school, promote a positive school climate, and help this population of youths-at-risk to have a better future or transition into adulthood (Hardaway, et al., 2011).

In Israel, there have been many intervention programs, but all of the programs were built for the Jewish sector and then transformed to the Arab sector. These programs are built by Jewish educators and do not take into consideration the special need and culture norms of the Arab students. There are many differences between the two sectors, different history, different religions, different customs, different language, different socio-economic situation and among other diverse historical differences. Therefore, it can be postulated that different intervention programs should be built accordingly to meet the unique needs of the minority Arab needs. Consequently, in this study, the research objective was to investigate this issue, the effectiveness and the contribution of these programs to the Arab youth at risk in the middle and high school levels. The choice of this age group was informed by the fact that it is considered a transforming phase between childhood and youth (Weisblay, 2012). From the researcher's and from the available literature, it is evident that pupils who pass the middle age with no problems usually attain successful adulthood lifestyles in terms of career development and financial independence (Solberg, Carlstrom, Howard, & Jones, 2007; Siegel, La Greca, & Harrison, 2009).

The challenges that the at-risk Arab youths encounter is further compounded by the fact that there is relatively little research on strategies schools

can use to increase participation and improve student engagement in education for youths in such at-risk categories. Although there have been increased implementation of retention initiatives, there has been a limited success when taking into account the youths in the Arab sector. The success of intervention programs also depends on the nature and type of school since it is difficult for some schools to promote interventions than others. That is because the youths at risk and intentions of early school dropout tend to be heterogeneous and spread unevenly across schools (Berkowitz & Benbenishty, 2012). For example, some schools have a high concentration of disadvantaged youths than others. In the Arab sector, addressing this challenge of early school dropout and disengagement among high-risk youths will fall on the most affected schools, because disadvantaged families are highly dependent on the quality of intervention programs in such schools to promote the success of their children. In order to help student most at-risk, there is a need to identify the best means of supporting and engaging the learners. The current research set out to explore the gap in the literature as applies to Arab sector at-risk youths and identify effective school intervention strategies that can work to improve student retention and engagement for at-risk learners.

The focus of this study sought to identify effective intervention strategies that schools can use to help improve student engagement and increase rates of school completion for students at-risk of early leaving in the Arab sector in Israel. As such, the specific ethnic populations largely dominant in the Arab sector include religions such as Muslims, Christians, and Druze. As such, this study was limited to these groups. Extensive research was conducted on at-risk youths in the Arab sector to identify suitable intervention strategies that can be used to prevent early leaving and promote school completion. Such an approach was intended to identify strategies that could help address risk factors for the unsuccessful transition of youths into adulthood. First, pre-intervention research was conducted to explore the

effectiveness of the existing strategies, followed by the formulation of intervention programs, and post-intervention assessment to examine the effectiveness of the proposed intervention strategies for at-risk youths in the Arab sector.

The research involved extensive use of interviews and survey questionnaires on schools in the Arab sector focusing on parents, teachers, and students in middle to high schools. Specific research interest was aimed at identifying factors that contributed to the successful completion of school and hurdles that contributed to early school dropouts or students' engagement in risk behaviors such as violence and drug use so as to work innovatively with parents, teachers, and students to propose new interventions to engage students. Experts on education matters such as principals, members of the community leadership group, and welfare staff at different schools in the Arab sector were interviewed to identify intervention strategies that participants identified as essential in improving student engagement in school and successful completion or transition from school to career programs.

A mixed method approach was used within this study, employing both qualitative and quantitative methods, to assess the formulated research aim, research questions, and hypotheses. The use of both quantitative and qualitative methods provided the opportunity to learn the "why" and "how" of school intervention programs among the youths-at-risk. In the quantitative part of the study, a semi-structured survey questionnaire was used to collect relevant information about the of the different intervention programs, which were used and are being used for Arab youth at risk in the middle school. In the qualitative part a case study, semi-structured interview questions were used to collect appropriate information on the intervention programs being used and are being used for youth at-risk youths in the Arab sector middle school. Both research methods were used to collect relevant information on the failures of the existing intervention strategies, in efforts to promote more effective interventions for the future transition of the at-risk youths.

The intervention program:

Based on the preliminary research and assessment of the existing intervention programs, the researcher made two primary observations. One, that the current interventions are effective to a limited number of students mostly from the Jewish sector in Israel but with less effective impacts on at-risk students from the Arab sector (Eccles, et al., 2014). Two, considering the shortcomings of the existing intervention programs, alternative intervention programs need to be conducted to identified and come up with suitable focus aimed at addressing the limitations of the existing intervention programs (Eccles, et al., 2014). As noted from the survey results, the name of the intervention program was dubbed “Every Student Achieves Excellency” (ESAE).

The ESAE program was conducted and evaluated throughout a duration of 8 months during the normal school program. Findings from the survey and interview processes revealed that upon conducting the ESAE intervention on the program it was proven that there were significant changes throughout the 8-month period and that in future there will be significant changes and subsequent better situation when the existing status quo is changed. In other words, the intervention program proved that whereas educators can replace some methods with new and creative methods, or when they change some programs and replace them with others, the status quo will get better. Specifically, the ESAE program had 3 main goals:

Goal 1: Help at-risk students close the achievement gap in school,

Goal 2: Help at-risk students become more engaged in school and responsible members of the community, and

Goal 3: Facilitate the transition of at-risk students from school to the labor market.

The ESAE program focused on the three specific goals based on previous insights on the failures of the existing intervention programs. Goal 1 attempted to close

the existing academic achievement gap in school between at-risk students who mostly come from the Arab sector compared to the students from the Jewish sector in Israel. Goal 2 attempted to address the failures of alternative strategies such as the *truancy supervision, Hila*, and *youth support programs* which have not fully helped the at-risk youth overcome engaging in marginal behaviors such as crime, and drug and substance abuse (Finkelhor, Ormrod, & Turner, 2007). Finally, Goal 3 attempted to create a continuous development path for at-risk students to transition from academics to the job market, unlike the existing strategies that remain a hindrance to students who fail in exams and get it difficult advancing into the next education level and the job market.

To correct relevant information for the intervention strategy, a total of 200 participants were recruited into the survey where a representative sample of 35 participants was purposefully sampled to take part in the semi-structured interview sessions. The 35 participants included 14 Muslims, 8 Christians, 7 Druze, and 4 Jewish students. To discuss the three goals above, a total of 4 meetings were organized with the participants. The objectives of each meeting have been briefly elaborated in Table 1. Meeting 1 was conducted to explore student-focused strategies that can be helpful in addressing the three goals in the ESEA Intervention Program. The table elaborates on the schedules, topic, and focus of each meeting, messages discussed and the results obtained during the interview sessions.

Table 1: Meeting schedules, topics, message, and results.

Schedules	Topic and Focus	Message	Results
Meeting 1	Student-Focused strategies	Discuss Goal 1 Discuss Goal 2. Discuss Goal 3.	1. Eliminate bias and stereotypes during mentoring and counseling. 2. Develop early and more intensive pathways and career planning in schools 3. Career guidance managed by a qualified career counselor.

			<p>4. Fine grain individualized and personalized educational needs for each student.</p> <p>5. Develop outreach and case management programs.</p> <p>6. Have targeted assistance in terms of skills development for low achieving students.</p>
Meeting 2	School-Wide Strategies		<p>1. Develop family-based programs such as mini-schools.</p> <p>2. Develop team strategies to support numeracy and literacy development.</p> <p>3. A project-focused and applied approach to learning.</p> <p>4. Broad curriculum access with strongly founded VET options.</p> <p>5. Develop annual interaction and assessment program on student progress & development.</p> <p>6. Have community frameworks to resolve conflicts and problems affecting students</p>
Meeting 3	Home and Community Strategies		<p>1. Organize group-centered after-school programs.</p> <p>2. Combine learning and counseling into a single curriculum.</p> <p>3. Ensure motivation becomes an ongoing year-long program.</p> <p>4. Promote self-efficacy, group process, and cohesion by changing current perceptions about change.</p> <p>5. Make career guidance and student interaction in a year-long program.</p>
Meeting 4	Government Program initiatives		<p>1. Promote relevant policies aimed at including all students in active learning.</p> <p>2. Allocate learning resources for all students considered at-risk.</p> <p>3. Make follow-ups to ensure recommended changes are actively implemented</p>

Out of the 200 participants who were selected to take part in this study, 105 participants took part in the intervention program while 95 did not a participant in

the program. That means that the control group consisted of 95 participants while the test or intervention group consisted of 105 students. After the 8-month program, a post-assessment interview was conducted from 15 randomly selected participants (from the 105 participants from the intervention group), while 15 participants were also randomly selected from the 95 participants who did not take part in the intervention program (control group). The total of 30 participants was then interviewed about the 8-month progress and the results from the control and intervention groups compared.

Discussion

The subsequent sections present the research interview findings after the ESEA Intervention Program showing changes before and after the initiative.

Student-Focused Intervention Strategies Will Initiate Individual Changes Among At-Risk Students

After the 8-month ESEA Intervention period, the researchers observed that initiating the student-focused strategies in Israel could substantially influence personal changes in students. These findings were evident based on the differences shared between the 15 interviewees who took part in the intervention program and the 15 interviewees who were in the Control group. For the purpose of this study, the interview quotes from participants who took part in the control group are presented for Intervention Participants (IP) for participants 1 to 15 (IP1- IP15). In contrast, results from the interviews who were in the control group have been abbreviated as (CG) for the 15 interviewees (i.e. CG1- CG15).

The interviewees agreed that after the ESEA intervention program, students who took part in the intervention posted positive development and changes compared to the control group. These observations were evident from the interview sessions as shown from the subsequent quotes below.

Taking part in the 8-month program has changed how I perceive school. I now understand the need for schooling and my personal experience in terms of skills, beliefs, and attitude towards teachers and other pupils have changed greatly. —IP5

I feel more involved in my school work and close social support from student daily tasks make the experience memorable and enjoyable. —IP9

The program has brought about a very supportive learning environment, there are more learning resources now in place such as books than the past where we had to share few learning materials or even lacked them... —IP 15

First, the interviewees shared about the important role that new student mentoring had on their 8-month ESEA Intervention program. According to IP 2, IP5, IP7, IP9, IP 13 and IP 14, the new mentorship program is continuous throughout the year and tutors or teachers are more informed about the dangers of labeling and ethnic stereotypes towards student failure and academic performance. In contrast, the control group insights revealed some level of frustration with the counseling process which was limited and did not address individual student concerns. These insights were further evident from the extracts from the interview questions as detailed below.

My teacher has become more positive towards me, I get good directions about career and his expectations about my academic progress to motivate me to work hard. —IP11

The teaching has changed and there is more emphasis on why I need to succeed, a kind of support I did not receive before. — IP13

Same problems still exist, there are less student and teacher interaction... at times the whole thing is confusing. CG4

The new program was also noted to be effective when more focus was emphasized on issues related to the early and more extensive pathway to career planning. IP7 and IP9 noted that when students do not know what they want to

become in the future, it is difficult for them to remain focused in school. Moreover, IP1, IP2, and IP 14 noted that lack of direction from teachers and the school to the students concerning career paths has been one of the main problems in keeping students engaged in schools. These insights were elaborately captured during the interview sessions,

The existing learning process does not motivate much about the future career prospect so students lack ambition. —CG7

My school rarely prepares us for the future. We just attend school as a formality. —CG15

Through the intervention program, the program has helped me ask important questions about where to go after school... having such a vision in life about the future helps me remain motivated to continue working hard. —IP10

Another important theme which emerged from the ESEA Intervention program was the need to ensure that the students' guidance and counseling should be guided and managed by qualified staff. The reasons for this were shared during the interview sessions as further exemplified below both from the control and the intervention groups.

The new program is professional and personnel reflects on the actual student problems. —CG3

Our counseling program is not detailed... at times culture and religious issues can emerge so your problems are considered in general terms and based on your background. —IP4

...of course, ...the new approach is open as it focuses on opening possibilities compared to the old program where there is ethnic profiling that we are failures... —IP13

The additional intervention programs identified during the ESEA program included initiating outreach and follow up programs to check on student

performance and development throughout the year. The control group noted the important role of embracing such an approach.

In the current programs, students are assessed through regular exams and no more. The teacher loses focus on your progress when schools resume for subsequent terms. —CG7

Learning requires close monitoring. If a teacher does not give feedback, it is not possible to know if you are on the right path or otherwise. —CG12

Close monitoring reduces the distance between the student and the teacher... active communication can develop, and in the process, the student can share their feeling about their concerns, challenges, and hurdles affecting their transition in school. —CG15

Besides the student-focused strategies, the research also identified the need for school-wide strategies which can be used to facilitate the academic development and progress of at-risk students in Israel, as further discussed in the next subsection.

School-Wide Intervention Strategies Can Facilitate Students' Achievement

The ESEA Intervention program further identified potential areas where the schools can improve on to facilitate students' achievement. The intervention team supported this approach as it played a major part in creating interests, developing positive perceptions about schools, and improving social relations and connections among learners and their teachers as evident from the interview sessions.

... studying as a small team of students is important in sharing. I found this approach important in improving my literacy skills and problem-solving. — IP1

I'm always more confident ready to share when I learn with my team. I get a lot of support from learning from the team. —IP3

Positive interaction leads to an appreciation of why I'm in school and helps me stay focused and motivated in my books. —IP14

In contrast to insights shared by the control group participants, the traditional classroom teacher interaction process alone is less productive. Some students noted that they may encounter challenges which they might find difficult to share with their teachers but easy to share with their peers. Some of these remarks have been noted below,

There is passive engagement in the classroom, at times I do not understand the concepts taught so I have to read it for myself. — CG2

With limited interaction with other students' classwork can become boring and a student can lose interest. — CG7

There is a feeling of detachment from the school learning environment because the instructing approach is less focused on students. —CG13

The need for the more focused attention of learning, teaching, and pastoral care was shared by the participants as shown from the quotes below.

When teachers show compassion, students feel more engaged and work towards integrating into the school. —IP14

Lack of feedback makes it difficult to take note of where things are right and where improvement is needed. —CG2

Emotional and spiritual support by teachers through pastoral care is important as learned in the course of the 8-month program. —IP10

In most learning settings, the main focus is largely limited to theoretical concepts about the learned materials. During the ESEA Intervention, the researcher observed that the participants were more vocal and concerned about a learning system that was more practical. As such, the intervention group noted that when they learned through applied and project-based concepts, where we're more engaged and initiated than when learning was merely limited to theory. The participants IP7, IP 13, IP 15, CG3, CG8, and CG12 noted that applied research

made the difference between successful learning in sciences and failure among the poor performing students in Israel schools.

Practical learning increases information retention and makes one thrilled to be part of the learning process. —IP13

...when there are applied studies, it is easier to relate difference concepts being taught...—CG3

This also reduces monotony in daily work as students engage in practical assignments. —CG12

Practical learning needs to be closely coupled with a change in attitude among teachers towards minority and at-risk students. One of the main changes that teachers need to adopt a note during the ESEA Intervention program is having high expectations on behavior change and student attendance. As previously noted, negative perceptions and stereotypes can affect the progress of students where teachers often have low expectations about the success of minority students from the Arab sector (Clark, Benkert, & Flack, 2006). The observation was made during the interview sessions that were conducted after the 8-month intervention program.

I felt more appreciated during the intervention program and became motivated and encouraged to work hard in school. — IP11

When there is no motivation, I feel sidelined and marginalized because I come from a poor background... discouraged to study and come to school... — CG5

... limited resources and poor family background can be used a weapon to taunt you and this means you have limited chances of remaining focused in school. — CG9

Home and Community Based Intervention Strategies Can Help Students Become More Responsible Citizens

The interview results also revealed that during the ESEA Intervention framework, students who received community and home intervention strategies showed positive progress than those who lacked this intervention. These

observations were also noted by other participants as indicated below from the interview sessions conducted after the intervention program.

...since learning is a continuous process... the group-centered activities after school kept me engaged with school work. —IP6

...for example, you can see that during the 8-month intervention, we were encouraged about the importance of learning through school-community programs... you get to engage with students from other schools. —IP 12

Separating the community from school makes the situation complex for a student, and one feels they are not in touch as you cannot create any visible link on why you should study. CG8

As noted during the interview sessions, these observations were particularly anchored on the need to create a seamless process to help learners be in a position to know what they are learning, why they are learning, and the potential benefits they stand to gain from such a process.

Studying without knowing your future is difficult and that is why guidance and counseling need to be considered an important aspect during classwork. —IP3

When teachers guide you about the future during studies, you become more curious and psyched up to succeed in studies. — IP9

Counseling during school work is central to being focused as one identifies their strongholds and what they want to become in the future. A student also becomes more interested in school and works hard to achieve the set goals. — IP14

The focus on counseling was also noted by interviewees with a specific focus on making close engagement between the school and students through a prolonged and continuous motivation process (Jing, Bettinger & Loeb, 2016).

A motivated student has high chances of achieving in school when the process is continuous throughout the calendar year. — IP1

Getting positive feedback can substantially influence student commitment to attend school and continue studying. –IP15

Periodic motivation is essential for the success of any student and that is what has been lacking in my school resulting in high rates of dropouts. –IPCG9

These processes can be integrated to include groups, cohesion, and build self-efficacy where the principle of change comes into play. According to the interviewees, the principle of change is central to the progress and performance of at-risk students.

...change initiatives facilitate how individuals perceive existing problems such as stereotypes and labeling. –IP13

Change of attitude among teachers about some students can work to motivate such learners in working hard in class. –CG3

Effective change can be achieved when the mentality of everyone about school performance and intervention can work to promote the interest of learners from minority communities from the Arab sector in Israel. –CG15

Government Interventions Can Facilitate Adoption and Implementation

In the final meeting, the researcher and the participants identified another theme during the ESEA program related to the role that the government can play in ensuring the identified strategies are adopted and implemented in schools and in the community. One of the limitations noted from the existing intervention programs was that despite the proactive initiatives in place to help at-risk students, the uptake and development have been minimal and almost none existence. In this respect, the government can play an important role in the success of this project. Two main aspects that the government can help improve on was related to improved resource allocation and close monitoring of intervention programs to confirm their implementation. These observations were shared by the interviewees as noted below,

The intervention programs often collapse because there are no resources to meet the proposed strategies. –CG3

...without material support and resource allocation to poor schools, the students at risk are less likely to receive the needed support, also... CG10

You are right. You can see from the intervention program that it was successful because there were enough resources. In the actual world where we live the same things don't manifest and this is frustrating... IP13

The remarks by the interviewees further emphasize that the success of any projected intervention program is largely reliant on resource allocation.

When projects get off the ground, they become beneficial for their intended purpose but when plans are forgotten the most affected become students at-risk in the society. –CG14

Yes, the government can help us in the implementation process through the education ministry because the process is viable. — IP9

I agree with you in that the success of any good intentions need close support and backup from the government. In itself, government support through evaluations and monitoring itself is an intervention strategy for program success. — IP13

After the New Intervention: Effectiveness of the ESEA Intervention Program after 8-Month Intervention

The current section presents the main statistical findings regarding the survey results. The findings on the impact of the existing strategies when compared to the new intervention program strategies are presented followed by additional statistical analysis to evaluate and confirm the observed results.

Impact of the Strategies Before and After the Intervention Program

Table 2 shows the results obtained from the existing intervention strategies in Israel for minority students before the ESEA intervention program was conducted. The results indicate that there was no significant difference between the two groups

at the start of the study. As such, this means that the students experienced similar impacts from the existing program in terms of their engagement with school, counseling, mentoring, and other educational aspects that the different programs are designed to achieve among the different students in Israel.

Table 2: Means and Standard deviation of variables before the intervention program

1. Effectiveness of Existing Program	Intervention Group (N=100)		Control Group (N=100)		p-value
	M	SD	M	SD	
Intervention's effectiveness - Teachers	4.21	.63	4.17	.62	.072
Intervention's effectiveness - Students	3.89	.53	3.85	.51	.051
Intervention's effectiveness - Staff	3.76	.47	3.75	.47	.073
Positive Effects	3.92	.61	3.91	.60	.112
Negative Effects	4.13	.59	4.11	.58	.088
General effectiveness	2.81	.39	2.79	.41	.083

Table 3 shows the results obtained after the intervention program. As evident, there are significant differences between the two groups after the intervention program. The findings reveal that there was a significant difference found between the intervention and the control group ($p < 0.05$). The findings revealed that the ESEA's effectiveness from the teachers in the control group was significantly lower ($M=3.71$; $SD=0.59$) than that of the intervention group ($M=4.05$; $SD=0.41$) with a p-value of 0.047 (that is $p < 0.05$).

Table 3: Means and Standard deviation of variables after the intervention program

2. Effectiveness of the New ESEA Program		Intervention Group (N=100)		Control Group (N=100)		p-value
		M	SD	M	SD	
ESEA's effectiveness - Teachers	-	4.05	.41	3.71	.59	.047
ESEA's effectiveness - Students	-	3.91	.37	3.21	.49	.021
ESEA's effectiveness – Staff		3.66	.29	3.17	.46	.012
Positive Effects		3.43	.47	2.91	.57	.004
Negative Effects		3.87	.39	3.02	.55	.048
General effectiveness		2.99	.27	2.51	.38	.033

Similarly, the results on ESEA's effectiveness among students from the control group was significantly lower (M=3.21; SD=0.49) than the one for students who took part in the intervention group (M=3.91; SD=0.37) with a p-value of 0.021 which is lower than the 0.05 level of significance used in the study. Furthermore, the findings indicated that there was no significant difference between male versus female students ($p > 0.05$), although there was a significant difference in the age of the participants ($p < 0.05$). The observations reveal that the risk factors are affected by the participants age possibly indicating that the older the participants are, the more risk factors they are exposed to, especially in the Arab sector where there is a huge difference between the status of boys versus girls, and the girls are often considered inferior to boys and therefore more likely to be oppressed.

The results also reveal that the effectiveness of the new intervention strategy from the staff who took part in the control group was significantly lower (M=3.17; SD 0.46) than the figures noted for the staff who took part in the intervention program

(M=3.66; SD=0.29) with a p-value of 0.012 ($p < 0.05$). Importantly, the results also reveal that the positive impacts among the participants who took part in the control group were significantly different (M=2.91; SD=0.57) compared to participants who took part in the intervention program (M=3.43; SD=0.47) with a p-value of 0.004 ($p < 0.05$). The findings further show that the negative impacts among the participants who took part in the control group were also significantly different (M=3.02; SD=0.55) compared to participants who took part in the intervention program (M=3.87; SD=0.27) with a p-value of 0.048 ($p < 0.05$). Finally, the general effectiveness of the intervention program among the control group participants was significantly lower for control group participants (M=2.51; SD=0.38) compared to the participants who took part in the intervention group (M=2.99; SD =0.27) with a p-value of 0.033 which is lower than the significance level of 0.05.

The findings on the effectiveness of the intervention program were further confirmed through meta-analytic analysis (Table 4). The results were considered statistically significant if its 95% confidence interval does not include zero. Similarly, the interpretation of nonoverlapping variables was done at 95% confidence interval as an observation of statistically significant moderator effect. Overall, the weighed \bar{d} value (across the control group and the intervention group) was -0.47, showing a large level of effect that the 8-month ESEA intervention had on the intervention group.

Table 4: Meta-analytic analysis on the effectiveness of the intervention program

Variables	<i>k</i>	<i>n</i>	\bar{d}	SE	95% CI lower	95% CI upper	Q	I ²
All samples	22	200	-0.47	0.05	-0.28	-0.19	116.72*	71.81%
1. Before the Intervention Teachers	19	42	-0.42	0.09	-0.49	-0.31	111.21***	

<i>Students</i>	15	130	-0.22	0.02	-0.03	-0.01	0.17*	71.61%
<i>Staff</i>	11	28	-0.21	0.04	-0.42	-0.29	127.91***	58.12%
								19.29%
2. After the Intervention								
<i>Teachers</i>	19	42	0.67	0.22	-0.23	-0.44	98.21***	51.771%
<i>Students</i>	15	130	0.51	0.17	-0.16	-0.08	0.35*	31.89%
<i>Staff</i>	11	28	0.44	0.03	-0.14	-0.11	56.64*	8.91%

Note. k = number of effect sizes; n = sample size; \bar{d} = average sample size weighted effect size (positive values indicate bias in favor of Intervention Group and negative values indicate bias in favor of Control Group); SE = standard error of \bar{d} ; 95% CI = lower and upper limits of 95% confidence interval; Q = statistic that tests whether the average effect is homogeneous; I^2 = percentage of the variability in effect estimates that is due to heterogeneity rather than sampling error (chance). The intended behavior outcome was left out because of K = 1.

*** Significant at the 0.001 level (2-tailed).

** Significant at the 0.01 level (2-tailed).

* Significant at the 0.05 level (2-tailed).

Nonetheless, Hedges and Olkin's (1985) Q-statistic shows a significant heterogeneity ($Q=116.72^*$, $p < 0.05$) in the estimate, indicating the presence of a moderator. Similarly, the 95% credibility prediction interval showed that the parameter estimate has a notable amount of variability between the groups (-0.34 to 0.28). To investigate the difference in the intervention outcomes among the participants before and after the intervention, each intervention outcome (Student strategies, school-wide strategies, home, and community-based strategies, and government interventions) was examined separately. The results for every outcome are presented in Table 5 below.

Table 5: Meta-analytic analysis on the effectiveness of the intervention program

Interventions	k	n	\bar{d}	SE	95% CI lower	95% CI upper	Q	I²
All samples	26	200	-0.36	0.05	-0.28	-0.19	103.82*	65.73%
1. Before the Intervention								
<i>Student-based strategies</i>	19	59	-0.42	0.17	-0.22	-0.31	92.82***	67.93%
<i>School-based strategies</i>	13	49	-0.26	0.02	-0.03	-0.01	0.26***	58.12%
<i>Home & community strategies</i>	16	42	-0.28	0.04	-0.42	-0.29	231.62**	19.29%
<i>Government interventions</i>	21	55	-0.24	0.72	-0.57	-0.36	92.28 ***	27.26%
2. After the Intervention								
<i>Student-based strategies</i>	15	71	0.42	0.22	-0.23	-0.44	98.21*	63.28%
<i>School-based strategies</i>	9	43	0.33	0.17	-0.16	-0.08	0.35*	31.89%
<i>Home & community strategies</i>	16	54	0.27	0.03	-0.14	-0.11	56.64*	18.91%
<i>Government interventions</i>	17	36	0.17	0.06	-0.36	-0.63	92.92*	34.28%

For the four intervention approaches broadly identified during the ESEA program, the results before the intervention showed significant negative effects for the existing program indicating they are less effective in helping students at risk. The category with the largest magnitude before the intervention was student-based strategies ($\bar{d} = -0.42$), which also showed the largest magnitude in favor of the intervention group after the intervention ($\bar{d} = 0.12$). The categories were followed by school-based strategies ($\bar{d} = -0.26$; 0.33), home and community-based strategies

($\bar{d} = -0.28$; 0.27) and government-based interventions ($\bar{d} = -0.24$; 0.17). These findings support the survey observations that student-based strategies have large intervention in helping learners stay focused and engaged in school and facilitate their academic achievement (Fowler, et al., 2009).

The test for homogeneity was significant for both the behavioral outcome ($Q = 111.32$, $p < .001$) and the employment suitability judgment outcome ($Q = 229.91$, $p < .001$), suggesting the presence of moderators. Because of the larger K values as well as the presence of heterogeneity, we examined the presence of moderators in the behavioral and employment suitability judgment outcomes, separately. The interpersonal evaluations outcome was not examined further because it only included five effect sizes, and the homogeneity test was not significant ($Q = 0.60$, ns) suggesting that moderators are not present.

The test for homogeneity was not significant at 95% CI before the intervention program for the four variables. That is $Q = 92.82$ ($p > 0.05$) for student-based strategies, $Q = 0.26$ ($p > 0.05$) for school-based strategies, $Q = 231.62$ ($p > 0.05$), and $Q = 92.28$ ($p > 0.05$) for government-based interventions. However, after the 8-month intervention program, the test for homogeneity was significant at 95% CI for the four variables that is $Q = 98.21$ ($p < 0.05$) for student-based strategies, $Q = 0.35$ ($p < 0.05$) for school-based strategies, $Q = 56.64$ ($p < 0.05$), and $Q = 92.92$ ($p < 0.05$) for government-based interventions.

Conclusion

Qualitative data was collected through a series of interview sessions which were conducted both before the study commenced and after the intervention program was completed. In the first interview session, the participants were asked to share insights concerning the existing interventions and how they impact the effectiveness of students at-risk in school. In the second interview session, there were two groups—that is the control group and intervention group. A sample of 30

participants (15 participants from each group) was recruited to participate in the post-intervention interview sessions. The intervention group was asked to share their opinion, insights, and feelings about the project which ran for a period of 8 months known as “Every Student Achieves Excellency” (ESAE). In contrast, the control group was asked to share whether the traditional programs continue to have any changes in their day-to-day engagement with the school activities.

Based on the current ESEA intervention program, the identified strategies were noted to address the shortcomings of the existing programs and in the process facilitate student integrating and connectedness to their schools with low rates of school drop outs. The proposed initiatives such as mini-schools, are ways of reducing students’ social isolation and strengthening relationships between students, parents, staff and the broader community. Participants commented that some of the most at-risk students have poor social skills and limited connections beyond their immediate family, and effective programs enabled students to increase both the number and quality of the connections they had with the school and the local community. In both this and other studies, schools with high retention had also worked hard to increase parents’ involvement and connectedness with the school. Relevant strategies include mini-schools, smaller class sizes, mentoring, student case management, peer tutoring, community service and supplementary or out-of-school-time programs.

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