

Impact of Matzmichim intervention on reducing violence

By Prof. Rolider and Mrs. Naama Gelman,
Department of Behavioral Sciences, Kinneret Academic College

Findings

This research sought to examine the impact of a Matzmichim-based intervention on the frequency of assault/aggression among students in the 4th, 7th and 8th grades who attend schools in the northern parts of the country. Specifically, the research examined the impact of the intervention on the prevalence of victims of violence in the physical sphere, the prevalence of victims of violence in the virtual sphere (cyberbullying), students' perceived sense of safety at school, and bystanders defending behavior when they witness acts of assault. The dependent variables were measured using a self-reporting questionnaire (see appendix 1) distributed to respondents firstly prior to the intervention and secondly a month following its completion.

As table 1 indicates, the study participants consisted of 104 Jewish Israeli students, of which 53 were girls (51%) and 51 were boys (49%). The table also indicates that the study participants included 20 4th grade students (19.2%), 60 7th grade students (57.7%) and 24 8th grade students (23.1%).

Table 1: Descriptive Statistics of Study Participants

N	%	Participants		
104	51	53	female	Gender
	49	51	male	
104	19.2	20	4 th Grade	Class
	57.7	60	7 th Grade	
	23.1	24	8 th Grade	
104	0	0	Arab	Sector
	100	104	Jewish	

Analysis of the First Research Hypothesis:

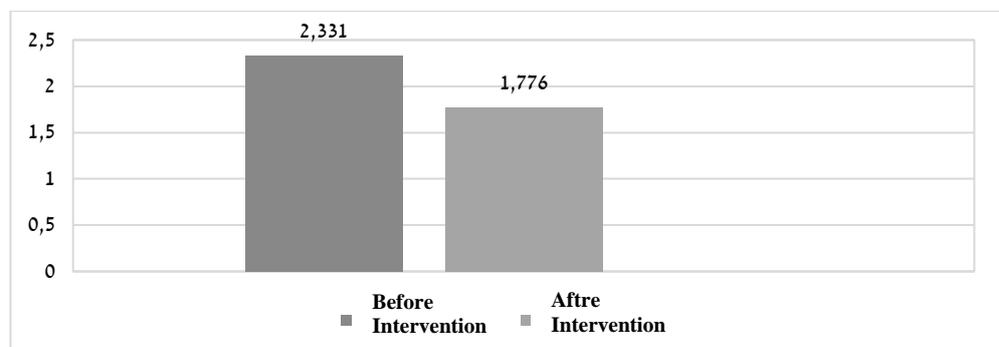
Table 2: Paired T-Test for Examining Variance in Prevalence of Victims of Physical Assault Before and After the Matzmichim Intervention

sig	T	df	SD	MEAN	
			0.859	2.331	Victims of Physical Assault Prior to the Intervention
0.000***	6.309	103			
			0.853	1.776	Victims of Physical Assault Following to the Intervention

*p<0.05 **p<0.01 ***p<0.001

To examine the hypothesis, which proposed that there will be a variance in the prevalence of victims of physical violence prior to applying the Matzmichim intervention and following the intervention, which will be manifested by lower prevalence of victims following the intervention, a paired t-test was applied. A clear difference was found between the prevalence of victims of physical violence prior to and after the intervention [t(103)=6.309, p<0.001], which indicated that the average prevalence of victims of physical violence prior to the intervention (M=2.331, SD=0.859) was higher than the average prevalence of victims following the intervention (M=1.776, SD=0.853) (see tables 2 and 3). This finding supports the first research hypothesis and suggests that as a result of the implementation of the Matzmichim intervention, there was a decrease in the prevalence of victims of physical assault.

Table 3: Chart Indicating the Variance in Prevalence of Victims in the Physical Sphere Before and After Implementing the Matzmichim Intervention



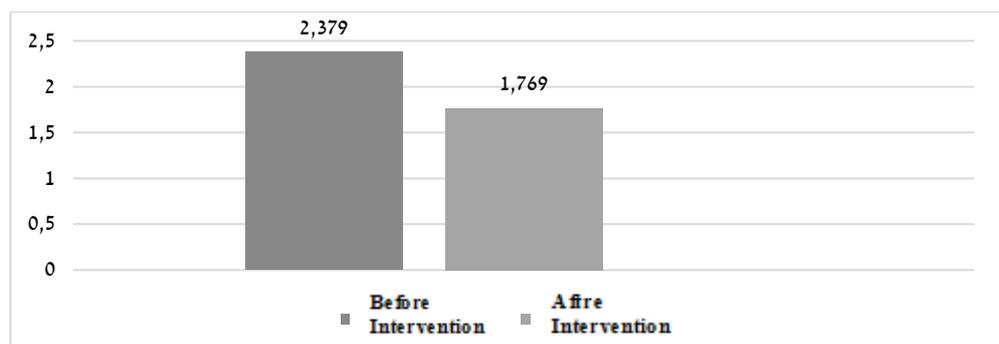
Analysis of the Second Research Hypothesis:

Table 4: Paired T-Test for Examining Variance in Prevalence of Victims of Cyberbullying (Violence in the Virtual Sphere) Before and After the Matzmichim Intervention

sig	T	df	SD	MEAN	
			0.899	2.379	Victims of Cyberbullying Prior to the Intervention
0.000***	6.467	103			
			0.926	1.769	Victims of Cyberbullying Prior to the Intervention

To examine the hypothesis, which proposed that there will be a variance in the prevalence of victims of cyberbullying prior to applying the Matzmichim intervention and following the intervention, which will be manifested by lower prevalence of victims following the intervention, a paired t-test was applied. A clear difference was found between the prevalence of victims of cyberbullying prior to and after the intervention[$t(103)=6.467, p<0.001$], which indicated that the average prevalence of victims of cyberbullying prior to the intervention ($M=2.379, SD=0.899$) was higher than the average prevalence of victims following the intervention $M=1.769, SD=0.926$ (see tables 4 and 5). This finding supports the second research hypothesis and suggests that as a result of the implementation of the Matzmichim intervention, there was a decrease in the prevalence of victims of cyberbullying.

Table 5: Chart Indicating the Variance in Prevalence of Cyberbullying Victims Before and After the Implementation of the Matzmichim Intervention



Analysis of the Third Research Hypothesis:

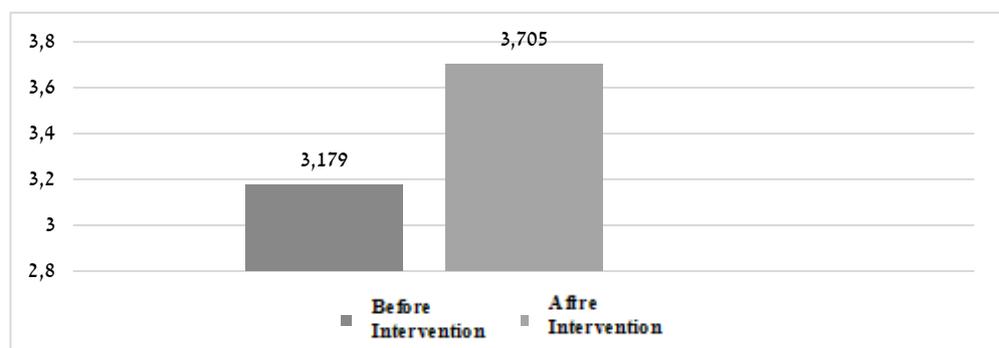
Table 6: Paired T-Test for Examining Variance in Students' Sense of Safety Before and After the Matzmichim Intervention

sig	T	df	SD	MEAN
			0.578	3.179
				Sense of Safety Prior to the Intervention
0.000***	6.781	103		
			0.912	3.705
				Sense of Safety Following the Intervention

*p<0.05 **p<0.01 ***p<0.001

To examine the hypothesis, which proposed that there will be a variance in respondents' sense of safety prior to applying the Matzmichim intervention and following the intervention, which will be manifested by higher prevalence of sense of safety following the intervention, a paired t-test was applied. A clear difference was found between respondents' sense of safety prior to and after the intervention [$t(103)=6.781, p<0.001$], which indicated that the average sense of safety prior to the intervention ($M=3.179, SD=0.578$) was lower than the average sense of safety following the intervention ($M=3.705, SD=0.912$) (see tables 6 and 7). This finding supports the third research hypothesis and suggests that as a result of the implementation of the Matzmichim intervention, there was a rise in the study participants' sense of safety.

Table 7: Chart Indicating the Variance in Sense of Safety Before and After the Implementation of the Matzmichim Intervention



Analysis of the Fourth Research Hypothesis:

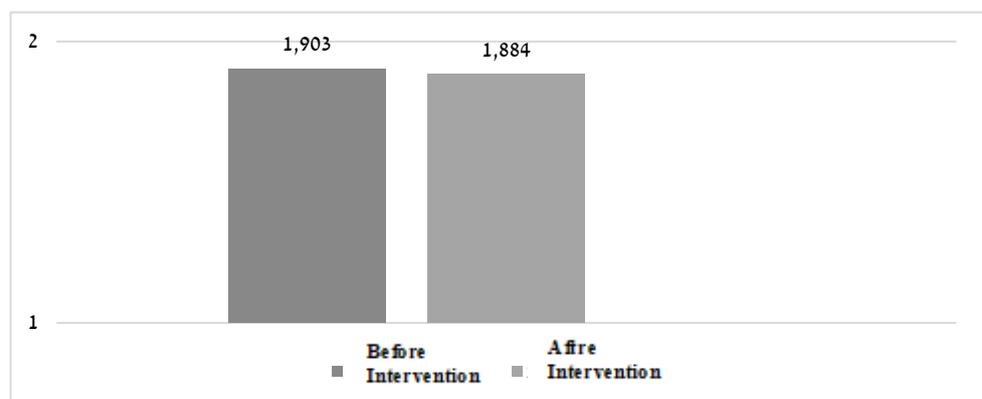
Table 8: Paired T-Test for Examining Variance in Bystanders Defending Behavior Before and After the Matzmichim Intervention

sig	T	df	SD	MEAN	
			0.782	1.903	Defending Behavior Prior to the Intervention
0.854	0.185	103			
			0.839	1.884	Defending Behavior Following the Intervention

*p<0.05 **p<0.01 ***p<0.001

To examine the hypothesis, which proposed that there will be a variance in the defending behavior of bystanders prior to applying the Matzmichim intervention and following the intervention, which will be manifested by higher frequency of defending behavior on behalf of bystanders following the intervention, a paired t-test was applied. A clear difference was not found between the defending behavior of victims prior to and after the intervention [$t(103)=0.185$ n.s], (see tables 8 and 9). This finding indicates that the fourth study hypothesis was not verified and suggests that as a result of the implementation of the Matzmichim intervention, there was no change in the defending behavior of bystanders in comparison to their defending behavior prior to the intervention.

Table 9: Chart Indicated the Variance in Bystanders Defending Behavior Prior to and Following the Matzmichim Intervention



Appendix

Appendix 1: Students Self Reporting Questionnaire for Assessing Wellbeing in School (Based on the Questionnaire of the Ministry of Education)

Students Self Reporting Questionnaire for Assessing Wellbeing in School (Based on the Questionnaire of the Ministry of Education)

Dear Students,

Thank you for your cooperation in filling out this questionnaire. The purpose of this questionnaire is to learn about your sense of wellbeing in school related domains. This questionnaire is anonymous and confidential!

Class: _____ I am a boy/girl

Please fill out the extent to which you agree with each statement:

Statement	Strongly Agree	Agree	Partially Agree	Disagree	Strongly Disagree
I like to be in school					
Even if I could, I wouldn't transfer to a different school					
I feel good at school					
My class is socially bonded					
Most of the kids in my class have someone to be with during recess					
Most of the kids in my class find it important to help each other					
The kids in my class care about each other					
There is a positive climate between classmates					

The school encourages students to show leadership					
All of the students in my school are fully socially integrated					
When someone suffers from assault and shunning, his friends defend him and do not enable harmful actions					
The students in my class treat the 'other' with respect					
At school we are encouraged to be tolerant towards the 'other'					
In the past month, a student extorted something from me by threat					
In the past month, I was badly beaten by another student					
In the past month, I was shunned by classmates					
In the past month, one of the teachers made fun of me, insulted me or verbally humiliated me in school					
In the past month, one of the students made fun of me, insulted me or verbally humiliated me in school					
In the past month, one of my students made fun of me because of my skin					

color, ethnic origin or religion					
In the past month, I endured profane language (swearing) and insults in social media networks - internet or cell phone (such as WhatsApp, Facebook)					
In the past month someone spread rumors about me in social media networks - internet or cell phone (such as WhatsApp, Facebook) with the intent of hurting me					
Sometimes I'm afraid to walk to school because there are students who behavior violently					
Sometimes I prefer to stay in the classroom during recess because I'm afraid of being hurt					
There are places in the school where I am afraid to walk about					
The school leads many activities to prevent and treat violence					
During recess there is always one or more teachers who are responsible for monitoring and preventing violence					
Teachers care about how I feel					

Teachers care about me beyond school assignments					
When I'm sad, I will feel comfortable speaking with a teacher					
I have close and good ties with teachers					

Appendix 2: SPSS Outputs – Descriptive Statistics

Frequencies

		Statistics		
		Gender	Grade	Migzar
N	Valid	104	104	104
	Missing	0	0	0
Mean		1.51	2.0385	2.0000
Std. Deviation		.502	.65245	.00000

Frequency Table

		Gender			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	51	49.0	49.0	49.0
	Female	53	51.0	51.0	100.0
Total		104	100.0	100.0	

Grade

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	τ	20	19.2	19.2	19.2
	τ	60	57.7	57.7	76.9
	n	24	23.1	23.1	100.0
	Total	104	100.0	100.0	

Migzar

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Jewish	104	100.0	100.0	100.0

Appendix 3: SPSS Outputs – Paired T-Tests (Conclusive Statistics)

T-Test

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Physical Assault Victims Before	2.3317	104	.85930	.08426
	Physical Assault Victims After	1.7764	104	.85397	.08374
Pair 2	Cyberbullying Victims Before	2.3798	104	.89902	.08816
	Cyberbullying Victims After	1.7692	104	.92674	.09087
Pair 3	Sense of Safety Before	3.1795	104	.57814	.05669
	Sense of Safety After	3.7051	104	.91294	.08952
Pair 4	Defending Behavior Before	1.9038	104	.78232	.07671
	Defending Behavior After	1.8846	104	.83965	.08233

Paired Samples Correlations

	N	Correlation	Sig.
Pair 1 Physical Assault Victims Before & After	104	.451	.000
Pair 2 Cyberbullying Victims Before & After	104	.444	.000
Pair 3 Sense of Safety Before & After	104	.514	.000
Pair 4 Defending Behavior Before & After	104	.146	.140

Paired Samples Test

	Mean	Std. Deviation	Std. Error Mean	Paired Differences
				95% Confidence Interval of the Difference Lower
Pair 1 Physical Assault Victims Before & After	.55529	.89765	.08802	.38072
Pair 2 Cyberbullying Victims Before & After	.61058	.96280	.09441	.42334
Pair 3 Sense of Safety Before & After	-.52564	.79058	.07752	-.67939
Pair 4 Defending Behavior Before & After	.01923	1.06106	.10405	-.18712

Paired Samples Test

	Paired Differences 95% Confidence Interval of the Difference	Upper	t	df	Sig. (2-tailed)
Pair 1 Physical Assault Victims Before &After	.72986		6.309	103	.000
Pair 2 Cyberbullying Victims Before & After	.79782		6.467	103	.000
Pair 3 Sense of Safety Before & After	-.37189		-6.781	103	.000
Pair 4 Defending Behavior Before & After	.22558		.185	103	.854