共創成長路
P.A.T.H.S.
to Adulthood
賽馬會青少年培育計劃
A JOCKEY CLUB YOUTH ENHANCEMENT SCHEME

P.A.T.H.S. to Adulthood: A Jockey Club Youth Enhancement Scheme (Project P.A.T.H.S.)

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Adolescent Developmental Issues and Phenomena

- Substance abuse
- Mental health problems
- Bullying
- Internet addiction
- Drop in family solidarity

The Need for Positive Youth Development Program

- Lack of systematic and sustainable positive youth development programs in Hong Kong
- Problem free is not fully prepared (Pittman,1991)
- Young people are not problems to be solved but resources to be developed

Social and Emotional Learning

Self-Awareness
Identifying emotions; recognizing strengths
Social Awareness
Perspective-taking; appreciating diversity
Self-Management
Managing emotions; goal setting
Responsible Decision Making
Analyzing situations, assuming personal responsibility, respecting others, problem solving
Relationship Skills
Communication, building relationships, negotiation, refusal

Introduction

Funding: A total of HK$750 million from The Hong Kong Jockey Club Charities Trust
Purpose: to promote holistic and positive development of young people
Feature: the first known scientific youth development programme designed for adolescents in different Chinese communities
Strategy: Development of positive youth development programs (particularly curricular-based programs) focus on 15 positive youth development constructs
Design of the Project: 2 Tiers (Tier 1: a universal positive youth development programme for students in Secondary 1 to Secondary 3 receiving 10-20 hours of training in each level of the junior secondary school year; Tier 2: a selective programme for adolescents with greater psychosocial needs)
Time Period: Phase I (2006/07 - 2008/09) / Phase II (2009/2010 - 2011/2012)
Research Team: The Hong Kong Polytechnic University, City University of Hong Kong, Hong Kong Baptist University, The Chinese University of Hong Kong, The University of Hong Kong

15 Positive Youth Development Constructs Covered in the Project P.A.T.H.S.

- Bonding
- Resilience
- Competencies: Social, Emotional, Cognitive, Behavioral and Moral Competencies
- Self-Determination
- Self-Efficacy
- Spirituality
- Beliefs in the Future
- Clear and Positive Identity
- Prosocial Involvement
- Prosocial Norms
- Recognition for Positive Behavior

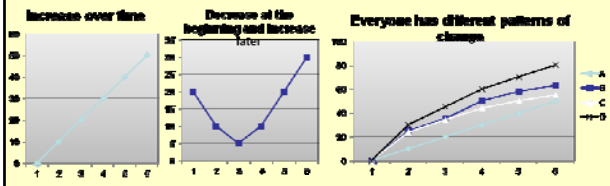
Multi-Method Evaluation

- Evaluation 1: Objective outcome evaluation (pretest-posttest) – first year
- Evaluation 2: Objective outcome evaluation (randomized group trial) – 5-year longitudinal study
- Evaluation 3: Subjective outcome evaluation (students)
- Evaluation 4: Subjective outcome evaluation (workers)
- Evaluation 5: Qualitative evaluation (worker focus groups)
- Evaluation 6: Qualitative evaluation (student focus groups)

Multi-Method Evaluation

- Evaluation 7: In-depth interviews with teachers
- Evaluation 8: Case study
- Evaluation 9: Process evaluation
- Evaluation 10: Interim evaluation
- Evaluation 11: Student products (weekly diaries; drawings)
- Evaluation 12: Evaluation based on personal construct psychology (repertory grid technique)

What is a growth curve model?



•To study the pattern of change over time: "Development Increases or decreases over time?"

•Any differences in the pattern of change?

•Everyone has different patterns of change

Methodology

	Total	Control (Non-PATHS students)	Experimental (PATHS students)
Schools	43	24	19
No. of students	5,934	3,272	2,662

	Time							
	Wave 1	Wave 2	Wave 3	Wave 4	Wave 5	Wave 6	Wave 7	Wave 8
Year	Sept. 2006	May 2007	Sept. 2007	May 2008	Sept. 2008	May 2009	May 2010	May 2011
Grade level	S.1		S.2		S.3		S.4	S.5
No. of Schoo ls	47* (1 experimental school had withdrawn after Wave 1)		44* (3 experimental schools had withdrawn after Wave 3)		43* (1 experimental school had withdrawn after Wave 4)		43	43

Number of collected questionnaires

	Wave 1	Wave 2	Wave 3	Wave 4	Wave 5	Wave 6	Wave 7	Wave 8
N (Schools)	48	47 [a]	44 [b]	44	43 [c]	43	43	43
N (Participants)	7,846	7,388	6,939	6,697	6,876	6,733	6,116	5,934
Control Group	3,797	3,654	3,765	3,698	3,757	3,727	3,442	3,272
Male	1,936	1,876	1,896	1,888	1,874	1,894	1,770	1,663
Female	1,613	1,619	1,666	1,599	1,682	1,679	1,592	1,554
Experimental Group	4,049	3,734	3,174	2,999	3,119	3,006	2,674	2,662
Male	2,154	1,998	1,691	1,548	1,632	1,591	1,408	1,427
Female	1,745	1,571	1,283	1,259	1,312	1,278	1,155	1,191
% of successfully matched	-	96%	97%	98%	99%	97%	93%	91%

Number of collected questionnaires across waves
[a] 1 Experimental school (n = 207) had withdrawn after Wave 1
[b] 3 Experimental schools (n = 629) had withdrawn after Wave 2
[c] 1 Experimental school (n = 71) had withdrawn after Wave 4

Methodology

Chinese Positive Youth Development Scale				
Bonding	Resilience	Social Competence	Emotional Competence	
Spirituality	Self-Efficacy	Behavioral Competence	Cognitive Competence	
Beliefs in the Future	Clear and Positive Identity	Prosocial Norms	Moral Competence	
Positive Identity second-order factor*		Recognition for Positive Behavior	Self-Determination	Prosocial Involvement

Substance use			
Alcohol	Tobacco	Ketamine	Cannabis
Cough mixture	Organic solvent	Ecstasy	Heroin

Delinquency					
Stealing	Cheating	Playing Truant	Runaway	Reviling	Trespassing
Damaging properties	Assault	Sexual relationship	Group assault	Staying away from home	Violence

Others		
Life satisfaction	Intention to Engage in Risk Behaviour	Academic and School Performance

Major Finding (1)

- Using positive youth development indicators such as moral competence, behavioral competence and positive identity, a) students in the Experimental Group (with P.A.T.H.S) had better development than did students in the Control Group (without P.A.T.H.S); b) students in the Experimental Group who perceived the program to be beneficial to their development had better development than did students in the Control Group.

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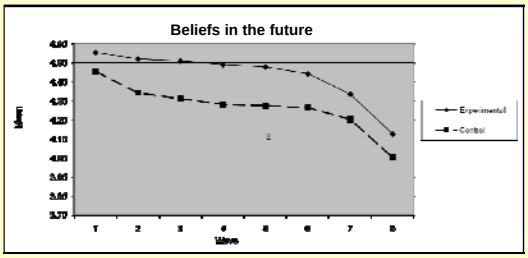
Example 1: Beliefs in the Future

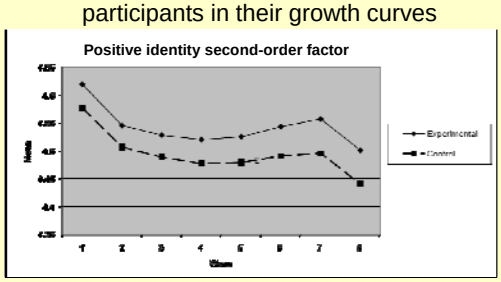
Differences between Experimental[a.] and Control Group participants in their growth curves



[a] Cases perceived the program positively
Group X Time[3] interaction effect ($p < .01$) after controlling the initial age and gender

Example 2: Positive Identity second-order factor

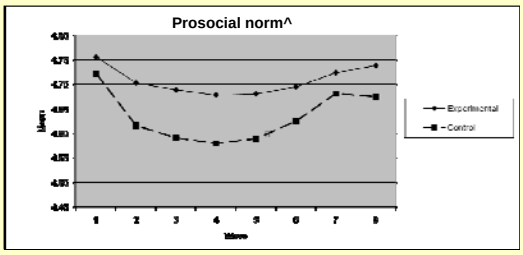
Differences between Experimental[a.] and Control Group participants in their growth curves



[a] Cases perceived the program positively
Group X Time[3] interaction effect ($p < .05$) after controlling the initial age and gender

Example 3: Prosocial Norm

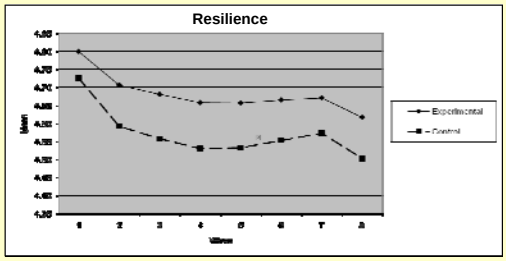
Differences between Experimental[a.] and Control Group participants in their growth curves



[a] Cases perceived the program positively
^ One item from prosocial norm subscale
Group X Time[2] interaction effect ($p < .05$) after controlling the initial age and gender

Example 4: Resilience

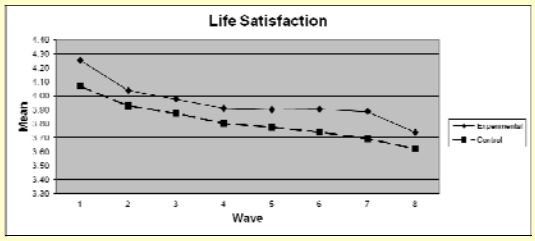
Differences between Experimental[a.] and Control Group participants in their growth curves



[a] Cases perceived the program positively
Group X Time[3] interaction effect ($p < .05$) after controlling the initial age and gender

Example 5: Life Satisfaction

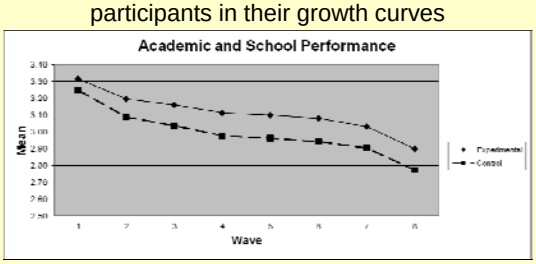
Differences between Experimental[a.] and Control Group participants in their growth curves



[a] Cases participated in Tier 1 program only
Group X Time interaction effect ($p < .01$) after controlling the initial age and gender
Group X Time^2 interaction effect ($p < .01$) after controlling the initial age and gender
Group X Time^3 interaction effect ($p < .01$) after controlling the initial age and gender

Example 6: Academic and School Performance

Differences between Experimental[a.] and Control Group participants in their growth curves



[a] Cases participated in Tier 1 program only
Group X Time interaction effect ($p = .05$) after controlling the initial age and gender
Group X Time^2 interaction effect ($p > .05$) after controlling the initial age and gender
Group X Time^3 interaction effect ($p > .05$) after controlling the initial age and gender

Table 1: Scale Scores of Positive Youth Development Constructs (1 = Lowest; 6 = Highest)

	Completed Secondary 3 (School:43; No of Students: 6,733)			Completed Secondary 5 (School:43; No of Students:5,934)			The largest group difference within 5 years			
Positive Youth Development Constructs	P.A.T.H.S. students (Experimental Group)	Non-P.A.T.H.S. students (Control Group)	Difference*	P.A.T.H.S. students (Experimental Group)	Non-P.A.T.H.S. students (Control Group)	Difference*	P.A.T.H.S. students (Experimental Group)	Non-P.A.T.H.S. students (Control Group)	Difference*	Time
Beliefs in the Future	4.50	4.31	4%	4.21	4.06	4%	4.49	4.25	6%	Completed Secondary 2
Positive Identity	4.46	4.39	2%	4.45	4.38	2%	4.46	4.36	2%	Completed Secondary 4
Prosocial Norm	4.45	4.36	2%	4.39	4.37	0.5%	4.41	4.29	3%	Completed Secondary 2
Resilience	4.71	4.61	2%	4.65	4.51	3%	4.65	4.51	3%	Completed Secondary 5
Life Satisfaction	3.94	3.80	4%	3.74	3.62	3%	3.88	3.66	6%	Completed Secondary 4
Academic & School Performance	3.10	2.98	4%	2.90	2.77	5%	2.90	2.77	5%	Completed Secondary 5

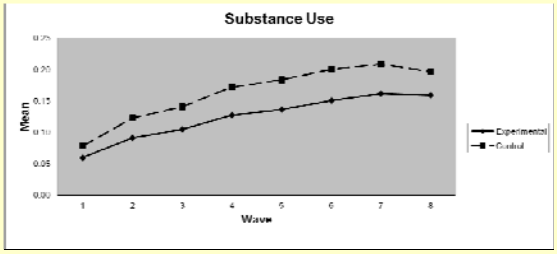
Note: a) all differences were statistically significant; b) baseline differences between Experimental group and Control group were controlled in the analyses; c) effect size for difference was low; d) effect size in this study was better than reports of previous studies in adolescent substance abuse and delinquency prevention.
* Difference = (Mean of Experimental group - Mean of Control Group) / Mean of Control Group x 100%.

Major Finding (2)

- Using substance abuse indicators such as smoking, drinking and illicit drug use, a) students in the Experimental Group (with P.A.T.H.S) had slower development than did students in the Control Group (without P.A.T.H.S); b) students in the Experimental Group who perceived the program to be beneficial to their development had slower development than did students in the Control Group.

Example 1: Overall Substance Use

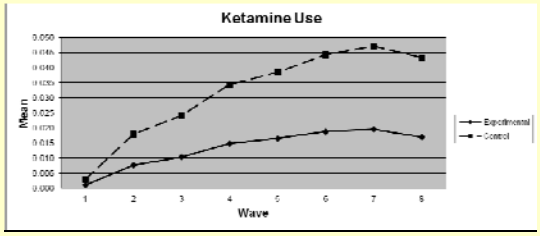
Differences between Experimental[a.] and Control Group participants in their growth curves



[a] Cases participated in Tier 1 program only
Group X Time interaction effect ($p < .01$) after controlling the initial age and gender
Group X Time^2 interaction effect ($p = .01$) after controlling the initial age and gender

Example 2: Ketamine Use

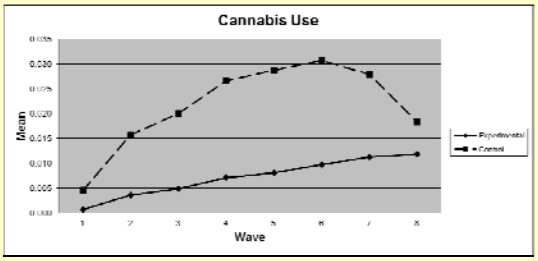
Differences between Experimental[a.] and Control Group participants in their growth curves



[a] Cases participated in Tier 1 program only
Group X Time interaction effect ($p < .05$) after controlling the initial age and gender
Group X Time^2 interaction effect ($p > .05$) after controlling the initial age and gender

Example 3: Cannabis Use

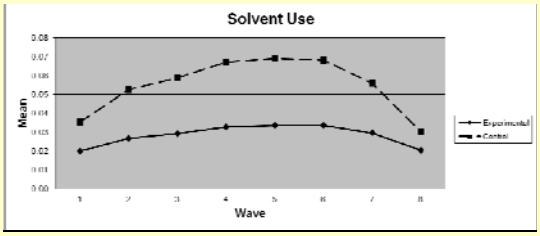
Differences between Experimental[a.] and Control Group participants in their growth curves



[a] Cases participated in Tier 1 program only
Group X Time interaction effect ($p < .05$) after controlling the initial age and gender
Group X Time^2 interaction effect ($p < .05$) after controlling the initial age and gender

Example 4: Solvent Use

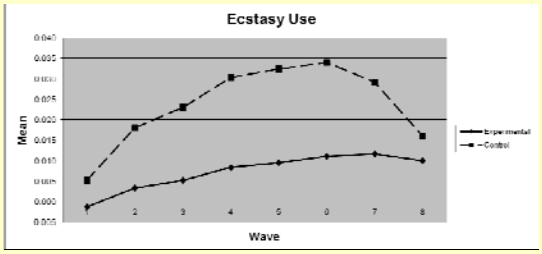
Differences between Experimental[a.] and Control Group participants in their growth curves



[a] Cases participated in Tier 1 program only
Group X Time interaction effect ($p < .05$) after controlling the initial age and gender
Group X Time^2 interaction effect ($p < .05$) after controlling the initial age and gender

Example 5: Ecstasy Use

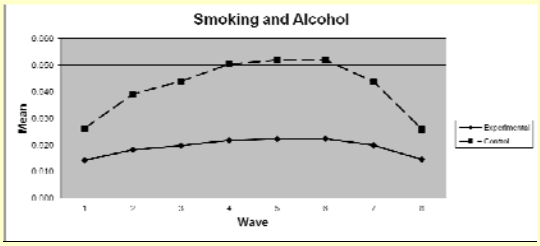
Differences between Experimental[a.] and Control Group participants in their growth curves



[a] Cases participated in Tier 1 program only
Group X Time interaction effect ($p < .05$) after controlling the initial age and gender
Group X Time^2 interaction effect ($p < .05$) after controlling the initial age and gender

Example 6: Smoking and Alcohol

Differences between Experimental[a.] and Control Group participants in their growth curves



[a] Cases participated in Tier 1 program only
Group X Time interaction effect ($p < .05$) after controlling the initial age and gender
Group X Time^2 interaction effect ($p < .05$) after controlling the initial age and gender

Table 2: Frequency of Substance use, Smoking and Alcohol use (0 = Never; 6 = Always)

	Completed Secondary 3 (School:43; No of Students: 6,733)			Completed Secondary 5 (School:43; No of Students:5,934)			The largest group difference within 5 years			
Problem Behaviors	P.A.T.H.S. students (Experimental Group)	Non-P.A.T.H.S. students (Control Group)	Difference*	P.A.T.H.S. students (Experimental Group)	Non-P.A.T.H.S. students (Control Group)	Difference*	P.A.T.H.S. students (Experimental Group)	Non-P.A.T.H.S. students (Control Group)	Difference*	Time
Overall Substance Use	0.15	0.22	47%	0.16	0.20	25%	0.15	0.22	47%	Completed Secondary 3
Ketamine Use	0.02	0.06	200%	0.02	0.03	50%	0.02	0.06	200%	Completed Secondary 3
Cannabis Use	0.01	0.05	400%	0.01	0.02	100%	0.01	0.05	400%	Completed Secondary 3
Solvent Use	0.03	0.07	133%	0.02	0.03	50%	0.03	0.07	133%	Completed Secondary 3
Ecstasy Use	0.01	0.05	400%	0.01	0.02	100%	0.01	0.05	400%	Completed Secondary 3
Smoking and Alcohol use	0.02	0.06	200%	0.01	0.03	200%	0.02	0.06	200%	Completed Secondary 3

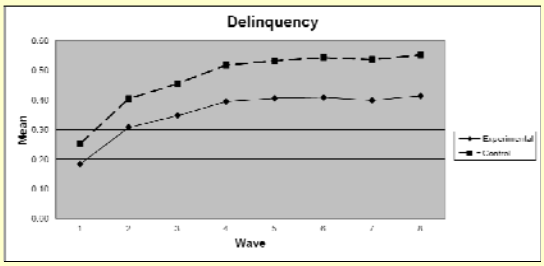
Note: a) all differences were statistically significant; b) baseline differences between Experimental group and Control group were controlled in the analyses; c) effect size for difference was low to moderate; d) effect size in this study was better than reports of previous studies in adolescent substance abuse and delinquency prevention.
* Difference = (Mean of Control Group - Mean of Experimental group) / Mean of Experimental Group x 100%.

Major Finding (3)

- Using delinquency and behavioral intention to engage in risk behavior as indicators, a) students in the Experimental Group (with P.A.T.H.S) had slower development than did students in the Control Group (without P.A.T.H.S); b) students in the Experimental Group who perceived the program to be beneficial to their development had slower development than did students in the Control Group.

Example 1: Global Delinquency

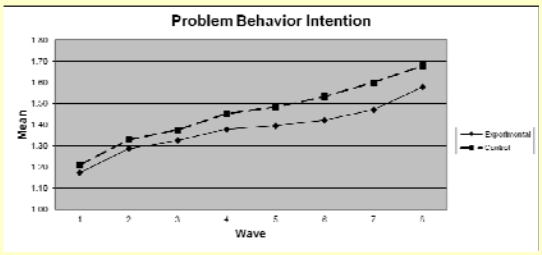
Differences between Experimental[a.] and Control Group participants in their growth curves



[a] Cases participated in Tier 1 program only
Group X Time interaction effect ($p < 0.5$) after controlling the initial age and gender
Group X Time^2 interaction effect ($p > .05$) after controlling the initial age and gender
Group X Time^3 interaction effect ($p > .05$) after controlling the initial age and gender

Example 2: Intention to Engage in Risk Behaviour

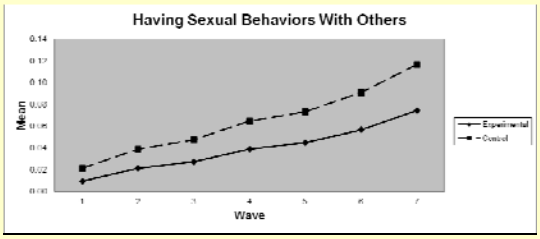
Differences between Experimental[a.] and Control Group participants in their growth curves



[a] Cases participated in Tier 1 program only
Group X Time interaction effect ($p > .05$) after controlling the initial age and gender
Group X Time^2 interaction effect ($p < 0.5$) after controlling the initial age and gender
Group X Time^3 interaction effect ($p < 0.5$) after controlling the initial age and gender

Example 3: Having Sexual Behaviors with Others

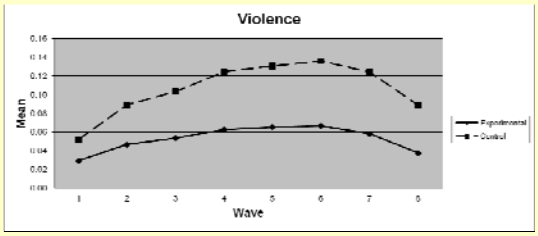
Differences between Experimental[a.] and Control Group participants in their growth curves



[a] Cases participated in Tier 1 program only
Group X Time interaction effect ($p < .05$) after controlling the initial age and gender

Example 4: Violence

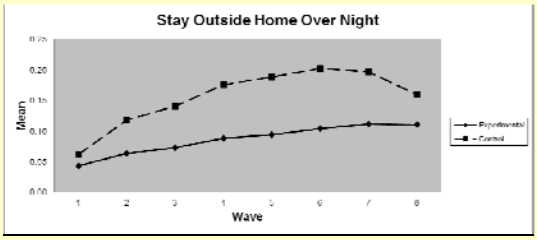
Differences between Experimental[a.] and Control Group participants in their growth curves



[a] Cases participated in Tier 1 program only
Group X Time interaction effect ($p < .05$) after controlling the initial age and gender
Group X Time^2 interaction effect ($p < .05$) after controlling the initial age and gender

Example 5: Stay Outside Home Overnight

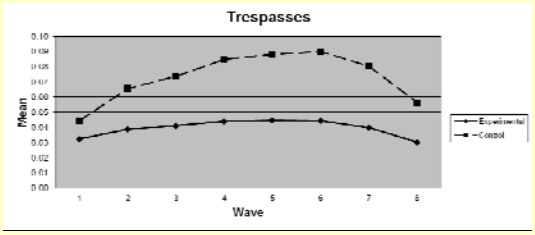
Differences between Experimental[a.] and Control Group participants in their growth curves



[a] Cases participated in Tier 1 program only
Group X Time interaction effect ($p < .01$) after controlling the initial age and gender
Group X Time^2 interaction effect ($p < .01$) after controlling the initial age and gender

Example 6: Trespasses

Differences between Experimental[a.] and Control Group participants in their growth curves



[a] Cases participated in Tier 1 program only
Group X Time interaction effect ($p < .05$) after controlling the initial age and gender
Group X Time^2 interaction effect ($p < .05$) after controlling the initial age and gender

Table 3: Frequency of Delinquent Behaviors (0 = Never; 6 = more than 10 times)

	Completed Secondary 3 (School:43; No of Students: 6,733)			Completed Secondary 5 (School:43; No of Students:5,934)			The largest group difference within 5 years			
Problem Behaviors	P.A.T.H.S. students (Experimental Group)	Non-P.A.T.H.S. students (Control Group)	Difference*	P.A.T.H.S. students (Experimental Group)	Non-P.A.T.H.S. students (Control Group)	Difference*	P.A.T.H.S. students (Experimental Group)	Non-P.A.T.H.S. students (Control Group)	Difference*	Time
Global Delinquency	0.43	0.55	28%	0.39	0.48	23%	0.43	0.55	28%	Completed Secondary 3
Intention to Engage in Risk Behavior	1.42	1.56	10%	1.55	1.64	6%	1.42	1.56	10%	Completed Secondary 3
Having Sexual Behaviors with Others	0.05	0.13	160%	0.09	0.16	78%	0.05	0.13	160%	Completed Secondary 3
Violence	0.06	0.14	133%	0.04	0.08	100%	0.06	0.14	133%	Completed Secondary 3
Stay Outside Home Overnight	0.11	0.25	127%	0.10	0.17	70%	0.11	0.25	127%	Completed Secondary 3
Trespassing	0.05	0.10	100%	0.03	0.06	100%	0.05	0.10	100%	Completed Secondary 3

Note: a) all differences were statistically significant; b) baseline differences between Experimental group and Control group were controlled in the analyses; c) effect size for difference was low to moderate; d) effect size in this study was better than reports of previous studies in adolescent substance abuse and delinquency prevention.
* Difference = (Mean of Control Group - Mean of Experimental group) / Mean of Experimental Group x 100%.

Conclusions

• Compared with students in the Control Group, students in the Experimental Group had: a) higher levels and faster development (or slower drop) in terms of different developmental outcomes; b) lower levels and slower development (or faster drop) in substance abuse and delinquency behavior.
•The Project P.A.T.H.S. protected students from risk behavior (i.e., delayed the onset of risk behavior) and it facilitated adolescent development (i.e., protective factor)
•The differences were statistically significant (i.e., not probability that the differences were due to sampling error was low).
•The effect size values were on par with or better than the international findings.

Impact of the Project (Impact on the Education System)

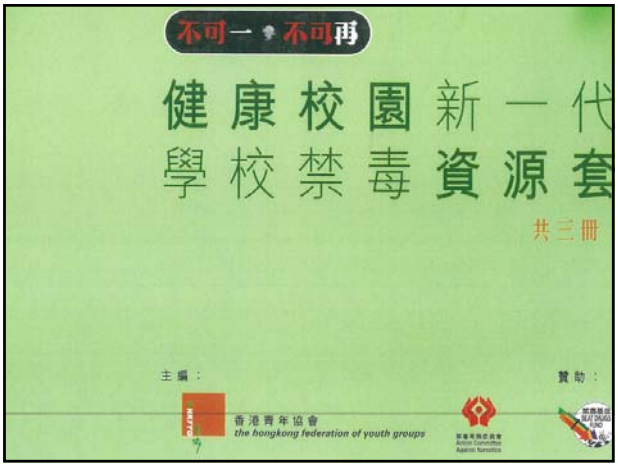
- Impact on secondary schools in Hong Kong regarding holistic youth development curriculum
- Provides a useful and practical framework with over 280 schools participating in the project. About 213,000 students have joined the scheme.
- More than half of the participating schools have included the program in the formal curriculum
- Receiving excellent comments from school principals, teachers and allied professionals

Impact of the Project (Impact on Government Policies)

- The project is regarded as an anti-poverty initiative by the Poverty Commission
- The project is regarded as a key youth enhancement initiative by the Government of the Hong Kong SAR
- The project is regarded as a key adolescent prevention program (e.g. Panel on Child Fatality Review; Task Force on Youth Drug Abuse)
- The project is listed as a program that can be used for anti-drug education in schools (Resource Kit for Teachers on Anti-Drug Education)

Impact of the Project (Impact Outside Hong Kong)

- The project has been adapted and implemented in Shanghai for 3 years
- The project has been adapted and implemented in Macau. The Education and Youth Affairs Bureau of Macau has initiated a pilot project to test the programs.
- Trial testing has been carried out in Singapore
- It has attracted the attention of overseas colleagues and institutions (Social Research Development Group, University of Washington). The University of Washington would collaborate with the Project P.A.T.H.S. to organize an international conference in 2012.



附件八：以其他團體設計的課程作為主線的推行模式（初中範例）

示例己：採用其他團體發展的課程推行禁毒教育（以「共創成長路」－賽馬會青少年培育計劃為例）

班主任課和 / 或課後活動推行「共創成長路」－賽馬會青少年培育計劃透過學校課程、成長課程、

德育及公民教育	約10-20小時
禁毒專題教育	約5小時
	共約15－25小時

推行模式：

課程 / 其他的基要學習經歷	主題	核心學習元素	建議活動
「共創成長路」－賽馬會青少年培育計劃課程結合個人、社會及人文教育學習領域、德育及公民	- 提升心理能力 - 提升生活技能	**核心課程** 1. 與健康成人和益友的聯繫 2. 社交能力 3. 情緒控制和表達能力	推行「共創成長路」－賽馬會青少年培育計劃第一層培育活動核心課程（10小時）或整全課程（20小時）http://www.paths.hk

Impact of the Project (Impact Outside Hong Kong)

- International recognition in academic journals and academic databases
- The project has generated many publications including books, book chapters, and journals articles
- Not just for publication sake but to create a sense of success and boost up the morale of the program implementers